

Saturday 15 December 2018

# Amateur Photographer



## Fujifilm XF10

Stylish APS-C compact with manual control **that fits in your pocket**

Passionate about photography since 1884

# How to succeed

Six **rising stars of photography**  
share their tips and secrets

**A3 printing  
without the  
ink costs**

The **Epson EcoTank  
ET-7750** printer on test

**No-drama  
panorama**

Master Photoshop's  
**powerful stitching**  
features



**Shoot still life  
on a budget**

Simple **home studio**  
techniques with basic kit

**Plus** Inside an Amazon warehouse ● Adonit PhotoGrip ● How in-body IS works



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Photographer: Conor McDonnell

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There has never been such a wide choice of affordable cameras and lenses (not to mention smartphones), which is great, but the downside is that everybody these days is a photographer. So how do you get your pictures noticed amid the Biblical flood of images being uploaded to social media every day? This issue, we speak to some of 2018's rising stars to discover how they

found a way to stand out, and hopefully build a lasting career, whether as a pro or successful serious amateur. Don't miss our guide to taking creative still lifes and portraits at home – a great project for winter's short, dark days – and we also take a look at Epson's latest A3 printer, which promises lower running costs. Our main review, meanwhile, focuses on the Fujifilm XF10 power compact, so there's lots to enjoy.

**Nigel Atherton, Editor**

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## ONLINE PICTURE OF THE WEEK

IMAGES MAY BE USED FOR PROMOTION PURPOSES ONLINE AND ON SOCIAL MEDIA

© IAN HULL



### Autumnal stag by Ian Hull

Canon EOS 7D Mk II, 100-400mm, 1/1600sec at f/8, ISO 400

This stunning silhouette of a stag was uploaded to Instagram using the hashtag #appicoftheweek. It was taken by photographer Ian Hull. He tells us, 'I took this image at the end of a five-week project on the spectacular deer rutting season. On this particular morning, activity was at its highest but nothing stood out as a photogenic moment to

capture. With all the action going on, I was stubborn and waited for this one stag to walk 100 yards parallel to where I was waiting, in order to line up with a small area between two trees to capture a lovely silhouette. In my opinion two things make this picture: the strong stance and the autumn leaves that are just visible as a backdrop.'

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### Send us your pictures

If you'd like to see your work published in *Amateur Photographer*, here's how to send us your images:

**Email** Email a selection of low-res images (up to 5MB of attachments in total) to [appicturedesk@ti-media.com](mailto:appicturedesk@ti-media.com).

**CD/DVD** Send us a disc of high-resolution JPEG, TIFF or PSD images (at least 2480 pixels along its longest length), with a contact sheet, to the address on page 26.

**Via our online communities** Post your pictures into our Flickr group, Facebook page, Twitter feed, or the gallery on our website. See details above.



## NEWS ROUND-UP

The week in brief, edited by Geoff Harris



© ANSEL ADAMS

### Ansel Adams exhibition

An exhibition of some of Ansel Adams's most magnificent landscapes has opened at the Atlas Gallery in central London, and runs until 2 February 2019. It features such memorable images as 'Mount Williamson, Sierra Nevada, from Manzanar, California, 1944', and many other seminal landscape images. See [www.atlasgallery.com](http://www.atlasgallery.com) for full details.

### New Olympus ambassador

Olympus has kicked off its documentary and low-light month with the announcement of a new ambassador, Gabrielle Motola. A travel and documentary specialist, Motola is an OM-D user who has an exhibition at the After Nyne Gallery in Holland Park, London. 'Henge to Henge' records her epic motorcycle ride from Stonehenge in Wiltshire to the Arctic Henge in Iceland, and runs from 12 December 2018 to 7 January 2019. See [bit.ly/hengetohenge](http://bit.ly/hengetohenge).



© GABRIELLE MOTOLA

### STC screen protectors at Jessops

STC Optics's range of camera LCD screen protectors are now being sold through Jessops. The STC Ultrarmor Tempered Glass Protector is suitable for DSLRs, mirrorless cameras and phones. 'The multiple anti-smudge, anti-reflectivity, blue-light cut coating prevents excessive fingerprint marking and makes the glass simple to clean,' says the company.

### Exploring loneliness and multiple sclerosis

The MS Society, along with Mumford & Sons' Ted Dwane and music photographer Louis Browne, have created 'The MS Connection': a photography exhibition that tells the stories behind the condition, and the loneliness it can lead to. After the private opening in London, the show will tour the country. See [www.mssociety.org.uk](http://www.mssociety.org.uk).



© LOUIS BROWNE

### Photokina 2019 cancelled

After one of the most newsworthy Photokina camera shows in recent years, the 2019 event will not be going ahead. The organisers have decided that next year's planned show did not give exhibitors enough time to develop concepts and new products. The next Photokina will run from 27-30 May 2020. See [www.photokina.com](http://www.photokina.com).

© TIM CLACK







# BIG picture

Tim Flach's new book and exhibition highlight the plight of endangered animals

LONDON-based photographer Tim Flach has become known over the past ten years for his stunningly stylised portraits (many of them studio-based) of animals. His first book, *Equus*, was published in 2008, and was followed by *Dog Gods* and *More Than Human*. His latest book project, the highly ambitious *Endangered*, is the product of two years spent travelling not only the world's wild places, but also a number of zoos and conservation projects, to photograph the creatures whose futures are most in peril. His subjects include this extraordinary-looking bird, the shoebill (left), which is said to number fewer than 5,000 in the wild.

The sumptuously printed images from *Endangered* (Abrams, £50) – from a hyacinth macaw resembling an angel in flight, to a semi-abstract of partula snails – are currently on show in London. You have until 3 January 2019 to catch the exhibition, which is being held at Wex Photo Video, 37-39 Commercial Road, London E1 1LF. Visit events.  
[wexphotovideo.com](http://wexphotovideo.com) for more information.

## Words & numbers

The more conscious  
I am of why I am  
taking a picture, the  
less successful it  
turns out to be

**Faye Godwin**

British photographer (1931-2005)

# 1 billion

Number of active Instagram users  
in June 2018, up from 800 million  
in September 2017

SOURCE: INSTAGRAM



ZY Optics has launched the Mitakon Speedmaster 65mm f/1.4 lens for Fujifilm G mount



# Intriguing lenses just before Christmas

IT'S BEEN a great year for camera and lens releases and it's not over yet, with some smaller lens makers now upping the ante. First up is Samyang, which has revealed a new manual focus 35mm f/1.2 lens as part of its XPert series. On release, it will be available in the Canon EF mount, making it suitable for Canon's full-frame DSLRs. The new glass offers a nine-blade diaphragm and 12 glass elements in 10 groups, with two aspherical elements and three HR (high-refractive)

elements. The minimum focus distance is 0.34m, and the lens comes with a petal-shaped lens hood. It's hardly compact, though, at just over 117mm long and weighing in at 1.1kg. The Samyang XP 35mm F1.2 goes on sale in January 2019 for US\$999 – see [www.samyanglensglobal.com](http://www.samyanglensglobal.com).

Meanwhile, Zhongyi Optics (ZY Optics) has released the Mitakon Speedmaster 65mm f/1.4 for Fujifilm G mount, which appears to be the fastest GF-mount lens available –

equivalent to 50mm f/1.1 on full frame. The lens has 11 elements in seven groups, with a rounded nine-blade diaphragm for attractive bokeh. The enclosure of the lens is made of metal and it has a built-in hood.

It's available from [www.zyoptics.net](http://www.zyoptics.net) for US\$799.

Finally, Voigtlander has released the Color-Skopar 21mm F3.5 and Ultron 35mm F2 Aspherical lenses designed for M

Samyang's manual focus XP 35mm F1.2 will be available in the Canon EF mount



The new Mitakon 65mm is said to be the fastest GF-mount lens available

mount cameras, including Leica M rangefinders and the company's Bessa range. Marketed under the company's Vintage Line, the new lenses have been designed to evoke the feel of equipment from the 1950s. Both lenses have a ten-bladed iris, and the Color-Skopar 21mm uses nine elements in eight groups, while the Ultron 35mm has eight elements in five. Exact pricing is yet to be confirmed, but the new lenses will go on sale in January. For more details, see UK distributor Flaghead's site at [flaghead.co.uk](http://flaghead.co.uk).



## COOPH turns up the heat

WINTER has come, so COOPH has released a heated photographer's vest/gilet with some neat extras. The company teamed up with heated apparel specialist THERM-IC to develop the heating system, which can keep you toasty for up to five hours thanks to the 5200mAh battery. An app enables you to control the temperature of the vest as you wish via a Bluetooth dongle, and the automatic mode is smart enough to work out whether you are moving or stationary, adjusting the heat as appropriate.

Lightweight and with a reversible padded design with plenty of pockets, it comes in a choice of navy or black. The vest is on sale now for €389 at store. [cooph.com](http://cooph.com).

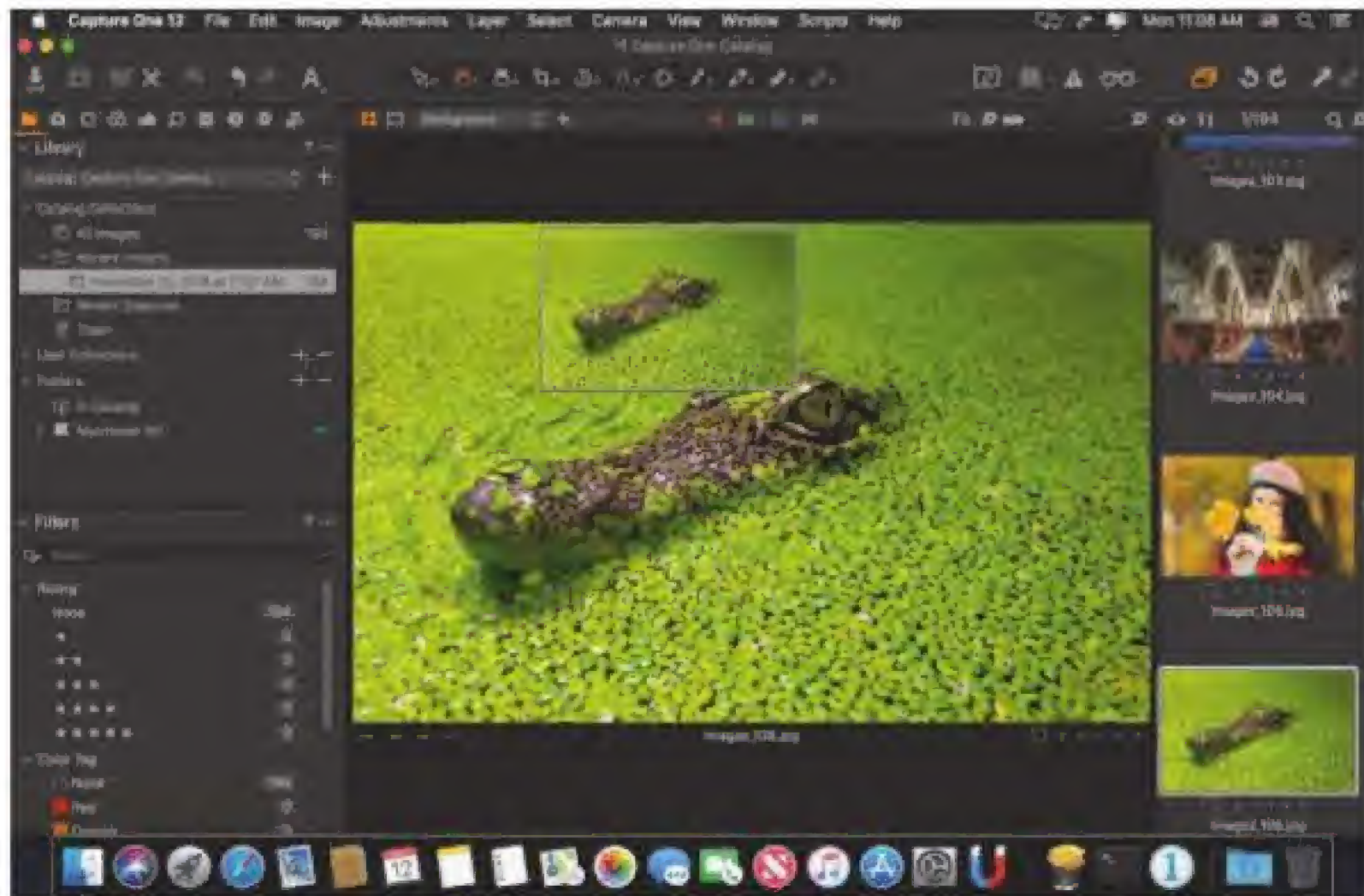


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Version 12 of the Capture One Pro software includes improved masking adjustment tools

## Capture One Pro 12 ramps up raw editing

PHASE One has released version 12 of its well-regarded Capture One Pro editing software, with support for raw files from the Nikon Z series, Canon EOS R and M50, and the Fujifilm GFX 50R.

Key features include a revamped interface, along with a trio of new masking tools. Luma Range enables you to create masks based on the brightness of pixels in an image and is the most powerful luminance masking tool of its kind, according to the company. 'This masking technique is particularly powerful in landscapes and high-key

portraits, as it allows for nearly instantaneous masks in complex scenes based on brightness – eliminating the need to tediously paint complex masks. Once a luminance range is created and adjusted using the mask-adjustment tools, nearly any editing tool can be applied.' For gradient masks, a new Parametric Masking Engine enables quick adjustments in the size, shape, and symmetry of the masks. This engine also lets you create Radial Gradient masks which can be edited later. Fujifilm fans will be particularly happy

with version 12, as it can process raw files from all Fujifilm cameras, including the new medium format GFX 50S and GFX 50R, and recreate 16 in-camera modes, including Fujifilm's Acros black & white Film Simulation, plus Velvia and Provia.

To buy the full licence of Capture One Pro 12 costs £299, but you can get Fujifilm and Sony-specific versions for £219. Or you can subscribe for £20 per month for the full version, or £16 per month for the Sony or Fujifilm flavours. For all pricing options, see [www.phaseone.com](http://www.phaseone.com).

## Stabilised 4K in your pocket

DJI HAS released what it claims is the world's smallest three-axis gimbal-stabilised 4K camera – the DJI Osmo Pocket – able to compensate for shake and movement to ensure the footage is as smooth as possible. Other key specifications include a 12MP CMOS sensor and an f/2.8 lens with an 80° field of view, along with an ISO range of 100–3200. It only weighs 116g, and is about four inches tall, so the unit is very portable.

Team up the DJI Osmo Pocket with your smartphone and the DJI Mimo app also enables you to edit movies on the move. The DJI Osmo Pocket will cost \$350/£329. See [store.dji.com](http://store.dji.com).

The DJI Osmo Pocket is designed to be able to compensate for shake



For the latest news visit [www.amateurphotographer.co.uk](http://www.amateurphotographer.co.uk)

## Back in the day

A wander through the AP archive. This week we pay a visit to December 1957



After the eyebrow-raising nude cover shenanigans of last week's Back in the Day, it's good to see we are back in the respectable days of the late '50s. The cover models look like they are trying to restrain the angry-looking snowman, so he really needs to chill out (groan). Let's hope our forthcoming Christmas is reassuringly white as theirs was. The Ilford film ad refers to a Winter Threesome, but we've got way too much class to snigger about that... Our favourite feature inside the magazine reveals how to express character in portraits, and the advice is still very relevant today. No, it's not philosopher Bertrand Russell on the opening page but actor Ernest Thesiger; his most famous movie role was Doctor Septimus Pretorius in James Whale's film *Bride of Frankenstein* (1935). The other geezer is a splendid-looking portrait painter called Nicolas Becker. We love his beard and rakish hat – back then, artists looked like proper bohemians, not DJs or somebody who's come to fix the boiler. More pre-Christmas vintage fun next week.



A still-useful piece on how to express character in portraits



Photo Stories

# Wish fulfilment

Going behind the scenes at an Amazon warehouse gives a fascinating glimpse into the story behind our online shopping orders, as **Amy Davies** finds out

**T**o the end user, online shopping feels like a very straightforward process. Place your order and, if you're lucky, whatever you've bought turns up as soon as the next day. Especially at this time of the year, millions of us are placing orders every single day – but if you've ever paused to wonder exactly how your deliveries are processed, this set of photographs should give you a little bit of insight.

Taken by freelance photographer Matthew Horwood, these intriguing shots show an Amazon fulfilment centre in Swansea, Wales. One of 17 such centres across the UK, it first opened in September 2007 and employs 1,200 permanent members of staff. To help with the seasonal rush, which generally starts in earnest around so-called 'Black Friday' (this year it was on 23 November), this site alone employs an extra 1,000 temporary workers.

The Swansea site covers some 800,000 square feet, making it as large as 11 football pitches. 'The site, which Amazon refers to as a fulfilment centre, is huge,' explains Horwood. 'It's quite deceptive, like a TARDIS. You leave one building and go into another and it almost stretches as far as the eye can see. I've driven past it quite often on the way to Swansea and it really doesn't look as big from the outside.'

Horwood has visited the site several times for various reasons – taking his first set of pictures in 2014. His most recent visit took place in November 2018, just ahead of Black Friday. 'It's surprising the number of changes compared with that first time. There was definitely a lot of new equipment, and the layout had been changed.' The latest visit was set up by Horwood himself rather than being a job or a commission. He says, 'It's interesting to see what goes on behind the scenes at these kinds of places – I'm pretty nosy. You

tend to take it for granted that something can be ordered on your phone and be at your door within 24 hours, so it's nice to see how it all works.' The resulting images were syndicated in various newspapers and magazines, a perfect illustration of our 21st-century shopping habits.

For the newest set of shots, he visited for just 40 minutes, taking pictures and video as he went. Although escorted around the site by an Amazon employee, Horwood was given free rein to photograph whatever he wanted to, albeit in a limited time. 'I'm glad I had someone with me as it would have been very easy to get lost. There was more than one occasion when I completely lost my bearings. We stopped in each spot briefly, and I'd shoot a few clips of video and a few pictures and move on. I could probably have done with spending a longer time in each spot. It really is the kind of place you could spend hours photographing. There was nothing I was prohibited from photographing, although I do wish I'd taken some pictures of the staff canteen.'

Conveying the enormity of the site was a key challenge, one which Horwood has executed very well by using the AF-S Nikkor 14-24mm f/2.8G ED lens to capture as much of the scene as possible. Adding a person into the pictures where possible also helps to give a sense of scale and perspective.

As you might imagine in a situation like this where time is limited, directing the 'models' is out of the question. 'The staff are all pretty busy and so there wasn't a chance to talk to them. Nothing was directed or set up; it was just a case of waiting,' Horwood says.

So next time you place that online order, whether a new camera or otherwise, and forget all about it until the postman comes knocking, spare a thought for where your item may be awaiting your purchase.



Including the human figures in this shot helps to give a sense of the massive scale of the building



A wideangle lens is a crucial tool for a job like this, where there is lots to see in every direction





## MATTHEW'S KIT



MATTHEW used either the Nikon D850 or the new Nikon Z 7 for these shots, along with 14-24mm, 24-70mm and 70-200mm lenses. No additional lighting was necessary since the warehouse is well lit. He says, 'It's easy to take too much kit on assignments like this and then resent having to carry it all around. I thought it would be a good idea to take enough to cover the 14mm to 200mm range with two bodies in order to avoid having to change lenses too often. Most of the pictures were taken with the 14-24mm and the 70-200mm, with the former being particularly useful. It's not a lens I use very often, but when you are trying to give a sense of scale it's certainly worth having.'

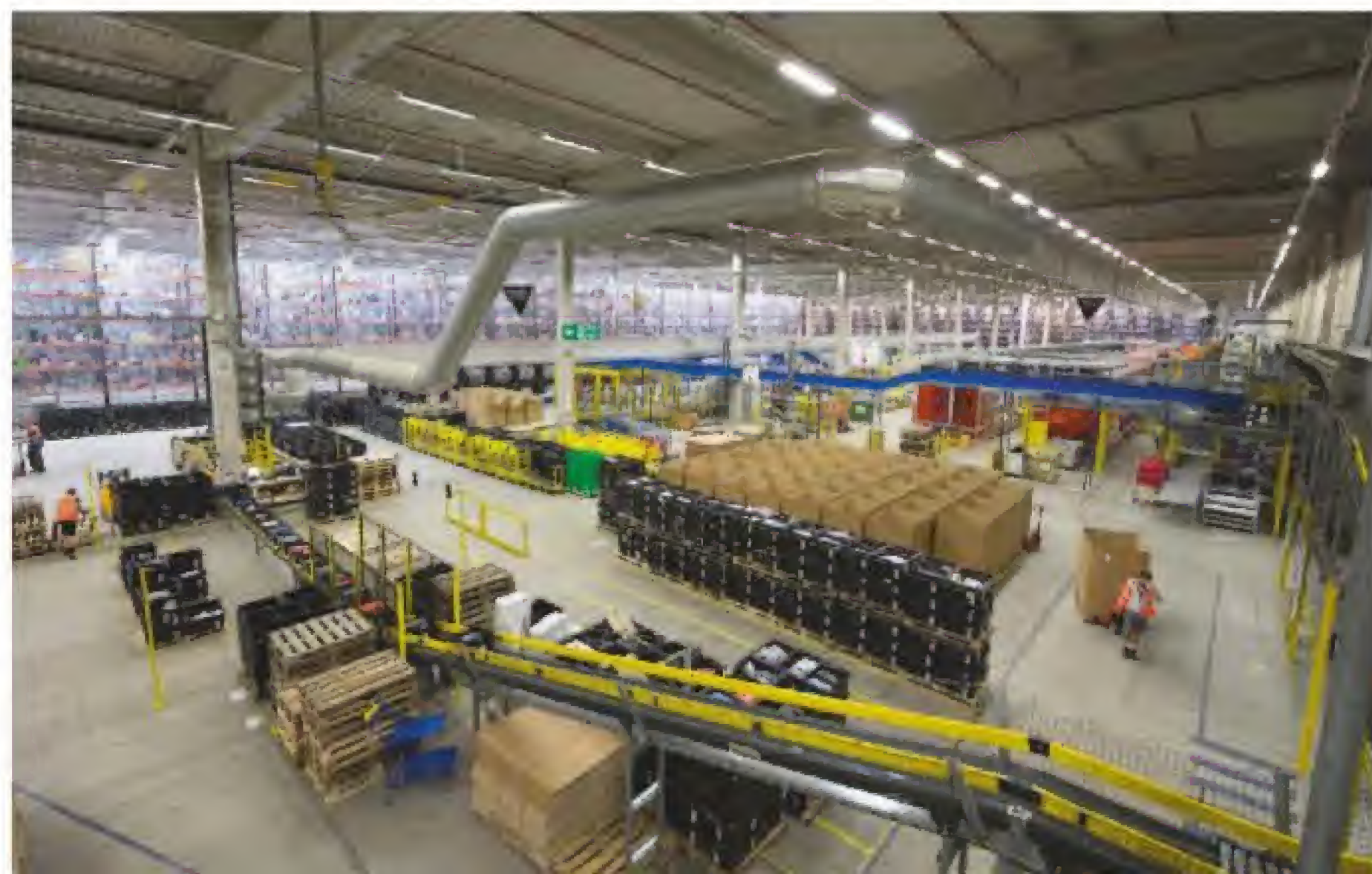


Left: The Swansea centre is one of 17 fulfilment centres across the UK. This one specialises in clothing and shoes



Right: More than 1,000 permanent members of staff work in the centre

Below: The enormous Amazon fulfilment centre in Swansea is the same size as 11 football pitches







## Viewpoint Jon Bentley

Photographers need to get behind the campaign to prevent the EU's latest Ecodesign directive – it's all about preserving the light we use

It's great when you sign a petition and it has an effect. It happened to me recently. The campaign was actually to save stage lighting but I think it's very important for photographers too. It was all about preserving a way of light.

The petition was initiated by the Association of Lighting Designers. It aimed to curtail aspects of the latest Ecodesign directive from the institution that seems to figure a great deal in our lives these days, paradoxically just as we're set to leave it, the EU. Ecodesign is a process that hopes to make products more ecologically friendly for the benefit of consumers and the environment. All manner of things are investigated, from washing machines to hairdryers, and even cameras, with the aim of making them more energy efficient and less harmful to dispose of.

### Colour rendering

Mostly, its effects are benign but I've always had a problem with Ecodesign's impact on lighting. Keen to set minimum light levels per watt, the rules have meant that traditional incandescent, and now tungsten-halogen light bulbs have been phased out for domestic and commercial use. Their replacements are mainly LEDs which are cheaper to run and lose less energy to heat. The trouble is they don't produce such good light quality. It's not the colour temperature – it's the colour rendering. Only tungsten has the ability to light the full visible spectrum we enjoy from daylight to candlelight. When you're relaxing by the TV in the evening, a more-efficient LED lamp isn't that much worse than an old-fashioned bulb. But when you're watching a performance in the theatre, or taking a photo, that extra light quality can really count.

In fairness the EU had recognised this. Ecodesign measures must have 'no significant negative impact on the functionality of the product, from the perspective of the user'. Photographic lighting for 'image gathering' and stage performance lighting has therefore been exempt. So far.



Only tungsten has the ability to light the full visible spectrum, from daylight to candlelight

But the latest directive proposed extending the measures to stage lighting. Going to the theatre would require enduring the grim light quality you get in a factory or warehouse. Theatrical power use is an infinitesimally small fraction of total energy consumption. The proposed new powers would be totally disproportionate. It would be like saying a classic Aston Martin or Morris Minor should be crushed because it doesn't meet some fuel economy target. And if stage lighting went, photographic lighting would be sure to follow.

Fortunately the petition seems to have worked. Thanks to international pressure the EU seems to have sensibly reined back on its draconian proposals. It's not a done deal but things look promising. In the long run, more-efficient tungsten lights may be a possibility. Until then we must be on our guard against any threat to extinguish the glorious light source of tungsten. Brexit won't help. Britain is just as enthusiastic as the EU when it comes to banning stuff. Photographers need to stand by our pens to sign the petition if they threaten to take our tungsten lights away.

Jon Bentley is a TV producer and presenter best known for *Top Gear* and Channel 5's *The Gadget Show*

In next week's issue

On sale Tuesday 18 December



Bumper issue

## Christmas SPECIAL

Our favourite photographic kit of 2018, plus 9 pages filled with great technique tips



### Don McCullin

We talk to the legendary photojournalist about his new book *The Landscape*

### Our images of the year

AP staff choose our favourite photos of 2018 and explain their impact

### Best Reader Pictures

The best images from this year's Reader Portfolio and Online Pic of the Week

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# Retail therapy

## Ffordes Photographic Ltd

[www.ffordes.com](http://www.ffordes.com)

- Founded 1960 by Reg Byford ● Based Inverness
- Number of offices One ● Number of staff 13



Staff at Ffordes collectively have expertise about both new and older kit

AP talks to Steve Byford of Ffordes, about the service it offers customers

### Why did you start the business?

Ffordes was started by my late father. He used to be a joiner in my grandfather's building business but had an accident and had to give up the building industry.

He was a passionate amateur photographer so decided to open a camera shop and share his passion for photography with others.

### What was the first item you sold?

I can't remember, as that was many years ago now. I joined the business carrying out camera repairs, then moved into sales a few years later – it was only meant to be for a few weeks to help out but I never left.

### What do you think sets you apart?

I think many things set us apart. A very important part of our business is the team we employ: they are all passionate about photography and I think this comes across when they speak with customers. It's not just about selling equipment, it is knowing that they have bought the right equipment and got the best advice.

We also collectively have a vast knowledge of not only new equipment but also brands and ranges of equipment going back many years so we can deal with a lot of kit throughout the generations.

### What do you specialise in?

We specialise in most of the major camera manufacturers but we have our favourites. Mine tends to be Leica.

### What's the most interesting or unusual thing that you have sold?

We have sold gold and platinum-plated Leica cameras, gold-plated Rolleiflex Aurum cameras, and a rare Urushi blue lacquered model.

We have also handled cameras made for NASA or that have been owned by famous photographers, and huge lenses such as a Leica 800mm Telyt I and an even bigger Nikkor 2000mm reflex lens which you would need a trolley to carry.

### What is your biggest single sale?

I think the biggest single sale to one person was over £75,000, an export customer who invested in Leica S and M series cameras and lenses.

### Who is your longest-serving member of staff?

My son, Ross. He has been working alongside me for around 20 years, so Ffordes is a third-generation business, something that is unusual in the photo industry.

### What is the most popular item you sell?

The Fujifilm X-T3 is very popular, and the Leica Q is still doing very well. There's also the Canon EOS 5D Mark IV, with its excellent sensor quality.

### How many items do you have in your current inventory?

We probably have 15,000–20,000 lines in stock, large and small items. When we are asked for that small item we know we have it somewhere!

### What's the most expensive item currently in your inventory?

We have some Leica limited-edition Terry O'Neil sets at £10,500 each. We also have Leica 75mm F1.25 Aspheric Noctilux lenses that are £10,250 – a bargain.

### What have you noticed are the current trends in photography?

A lot of customers are downsizing to smaller and lighter-weight camera systems. As photographers we all like to carry every lens with us, which is back breaking, but with Fujifilm, Olympus OM-D or the Sony A series, customers get everything they need but at half the weight. Also, the Leica CL and compacts are popular.

### What are your plans for the future?

To continue to offer our customers the best advice and service possible. While adapting with the market and customers' trends, we also aim to make it an enjoyable and memorable experience dealing with us.

## Best sellers

What Ffordes customers are currently buying



- 1 Leica M10
- 2 Leica Q
- 3 Fujifilm X-T3
- 4 Tamron 25-70mm Sony E mount
- 5 Sigma 14-24mm f/2.8 DG HSM Art



Around 15,000–20,000 lines are currently in stock



Ffordes specialises in most of the big manufacturers



ROTOLIGHT

NEO II

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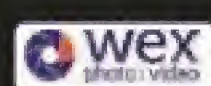
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NEXT TRADESHOW

JAN 17-19 / STAND 91







Still life of spoons holding different flours using the classic set-up of light source, subject, reflector. In this case we moved a small table closer to the window  
Canon EOS 5D Mark II, 24-70mm, 1/100sec at f/5.6, ISO 400

## KIT LIST



### ◀ Reflector

Get a 5-in-1 reflector that has a diffuser with a zip-over cover (normally gold, silver, white and black). Either buy a very expensive one from a top-of-the-range photographic company that will last, or a very cheap and cheerful one from the internet. If you choose the cheap option, buy two!



### ◀ Backdrops

These can be anything, but I favour fabrics. I make my own by painting up old linens, and never travel without a length of black velvet, which can be clamped, or pinned up against anything. Make sure you have some small ones for still-life situations and some long enough for portraits.





# it simple

Lighting is the key to any studio set-up. Tim Clinch shares his considerable expertise on creating professional-looking studio conditions at home



## Tim Clinch

Tim Clinch is an award-winning professional photographer with more than 40 years' experience. Over

the years Tim has had his work featured in magazines and has had more than 30 books published featuring subjects as varied as interiors, travel, food and portraits. Visit [www.timclinchphotography.com](http://www.timclinchphotography.com).

**W**hen deciding to make a studio at home to shoot portraits or still life, you can make life as complicated as you like. In fact, I firmly believe that it is in the interests of the photographic manufacturers trying to sell you stuff that you do, but by following the simplest of rules, and buying some of the cheapest 'kit', you can still produce stunning work that you can be proud of with the absolute minimum of fuss.

So, you have decided to start shooting some carefully considered portraits, or some still-life set-ups. Of course you want to shoot in a controlled environment, so it makes sense that you use your home as the perfect location to create your own studio set-up.

The key to any studio situation – be it a fully functioning professional photographic studio filled with massed ranks of lighting, backdrops and reflectors, or a simple set-up in your living room, next to a window – is lighting. Before we get started on this, let's get a few things sorted out from the outset.

In the world of photography, when it comes to lighting I am growing increasingly tired of hearing people say, almost always rather sniffily, 'Oh I never use any extra lighting, I only shoot with daylight.'

Fair enough, so do I these days, but for the vast majority of photographers in the digital age 'lighting' has come to mean turning on the on-camera flash. However, lighting is a skill, learned very carefully over the years by legions of good photographers and professional film lighting cameramen, and is certainly not something to be taken lightly.

### ◀ Stands

You will need at least a couple of these and a cross pole to clamp the aforementioned backgrounds on to, or to hang stuff from. You will also need a few clamps, ideally in a variety of sizes.



### ◀ A fold-out toolbox

The more you shoot in a controlled studio setting, the more bits and bobs you will accumulate – clamps, string, torches, cables, etc. Keep yourself organised and everything in one place. I have travelled with my 'bits box' since my assisting days.

ALL PICTURES © TIM CLINCH



## MANIPULATING LIGHT

This is an example of what I mean by 'top three-quarters' lighting and how to manipulate it to your advantage. I was shooting a cookbook about Gascon food in South West France and we had to illustrate a dish called *beurre de Gascogne*, made

famous by the local chef André Daguin. It's a mixture of red wine, Armagnac, shallots and duck fat. It's delicious, but a rather alarming mauve colour. Here are the steps I took to shoot it, showing how I achieved my final image.



### 1 Find a suitable location

First things first, we had to pick a location for our studio set-up. We decided on the kitchen table, which was lit from above by a small skylight in the low roof. As it was, the lighting was too harsh but it was in the right place and I knew we could tame it.



### 2 Filter the light

Under the watchful eye of cook and home economist Kate, I got my assistant Jack to hold the diffuser over the set-up to filter the harsh light. This is when a 5-in-1 reflector comes in handy, as we had the outer reflector casing if we needed to bounce some light back in.



### 3 Top three-quarters

Et voilà! As simple as you like, the harsh lighting was softened by simply holding the diffuser at the ideal 'top three-quarters' position. I did not need a reflector in the end as there was a white wall to the side, which was doing the job instead.



### 4 Added details

On to the finished picture. The crusty bread was spread with a dollop of the *beurre de Gascogne*, positioned carefully, with a few artfully placed crumbs scattered on the table and a tea towel hung on the back of the chair behind to add a splash of colour.



### 5 Fine-tune the set-up

However, on the second inspection of our image, we found the splash of red from the tea towel in the background too distracting. We removed it (keep it simple, stupid) to ensure the viewer could concentrate on the main subject of the scene.



### 6 Post production

Finally I processed the image in Alien Skin's excellent post-production plug-in, Exposure 4, which works seamlessly with Lightroom using one of the Kodachrome presets. This toned down the alarming mauve colour while adding contrast and warmth.





Here I set up a black background, used the light from the door to illuminate the subject and added a reflector to fill in the shadows Canon EOS 5D Mark III, 24-70mm, 1/500sec at f/5.6, ISO 1250

### ► The fundamental question

Ask yourself what a studio is. A 'studio' does not mean the building, nor does it mean the room it is in. A studio is any controlled situation where you are in charge of what you want to shoot and can light it to perfection. That lighting can be from a vast array of expensive lighting equipment, or something we all have, a window, but the fundamentals are exactly the same.

As I said in the introduction, you can make lighting as complicated as you like, but as with any discipline, before you start to experiment it is essential to master the basics. In this case the absolute basics, the building blocks of lighting.

The phrase professional photographers use to describe the most basic of lighting set-ups is 'top three-quarters'. This is the simplest way to light anything, but is also in the DNA of all professional photographers. It is the equivalent of putting the keys in the car before you drive anywhere; it is turning the pedals on your bicycle; it is putting water in the pan before you boil your egg. Something that you almost never think about, but is always, always there. So before we start building our home studio, let me explain why, by mastering this one simple discipline, you will learn

to take your 'home studio' with you at all times.

'Top three-quarters' means that your main lighting source is at roughly a 45° angle above the subject you are lighting. Think about this and you'll realise that, as long as you get the sun in the right place, this is basically what the sky does. Yes, you can mess about with all sorts of gadgets along the way; you can buy all sorts of weird and wonderful snoots and gizmos to titivate your lighting set-up, but 'top three-quarters' is where it all starts.

### Equipment

I've said that I prefer to shoot with daylight. That's all very well, but it's learning how to tame it and to make it your friend where the skill and experience come in. And there are three words that will make a massive difference to anything you want to shoot in a controlled situation. Those words are, 'get a reflector!' There are a few more things that are also useful (see kit list on the opening page), but if I had to choose one thing to improve your shots in your home studio it would be a reflector.

### Setting up

By far the biggest mistake I see when people are setting up a studio environment is that they

## Tim's top ten tips for studio set-ups

**1** Move! Move yourself, move your background, move your subject. Do not set something up and light it before carefully checking out the space you have available.

**2** Choose your lens carefully. When shooting in a studio situation you don't want a wideangle. Always choose a standard, or a long(ish) lens. This gives you room to work, and means that you won't be too close to your subject and risk distortion.

**3** If shooting with light from a window, make sure you know how the light will change during the day and choose the time to shoot accordingly.

**4** A reflector is always useful for shadow detail, but rules are made to be broken, so always shoot with and without. You may prefer those deep, filled-in shadows.

**5** If you don't have daylight, experiment with lighting. This can be as simple as putting a standard lamp through a diffuser, but always remember the 'top three-quarters' rule.

**6** Be organised. It is very easy when shooting in a studio situation to get messy and leave things all over the place. So it is important to be disciplined.

**7** Don't rush, and make sure you remain in control. You are the boss and everything you do in a studio situation will directly affect your image. Make sure you get what you want.

**8** Phone a friend. If you know someone who is interested in photography, ask them to come and help out and then return the favour. It makes a huge difference and is a great way to learn.

**9** A tripod is great, but don't be afraid to take your camera off the pod and handhold. Always check your shutter speed though. I can handhold down to 1/15sec. More than that and I will use a tripod.

**10** Last, a bit of all-purpose advice. Unless you are shooting Usain Bolt running the 100 metres... slow down. Never rush things, give yourself time to think and, most importantly, look.

Use a reflector to bounce some light into the shadows to reveal more detail Fujifilm X-Pro1, 35mm, 1/550sec at f/1.4, ISO 200





## 'A "studio" is not a building; it's a state of mind. I have been carrying my "studio" around the world'

➤ will often set up their equipment before looking around at the situation. Think about what you are going to need. For example, if you are using a background, don't put it against a wall – you might need to get in behind it, so give yourself room to move. Try to make sure that you have enough space to get to your subject easily. This is especially important when shooting still life as you will be moving between your camera and your subject constantly, adjusting and arranging things. A studio does not necessarily mean a static situation. A tripod is always good, but take your camera off and move around. Small differences in angle can mean big differences in your final image.

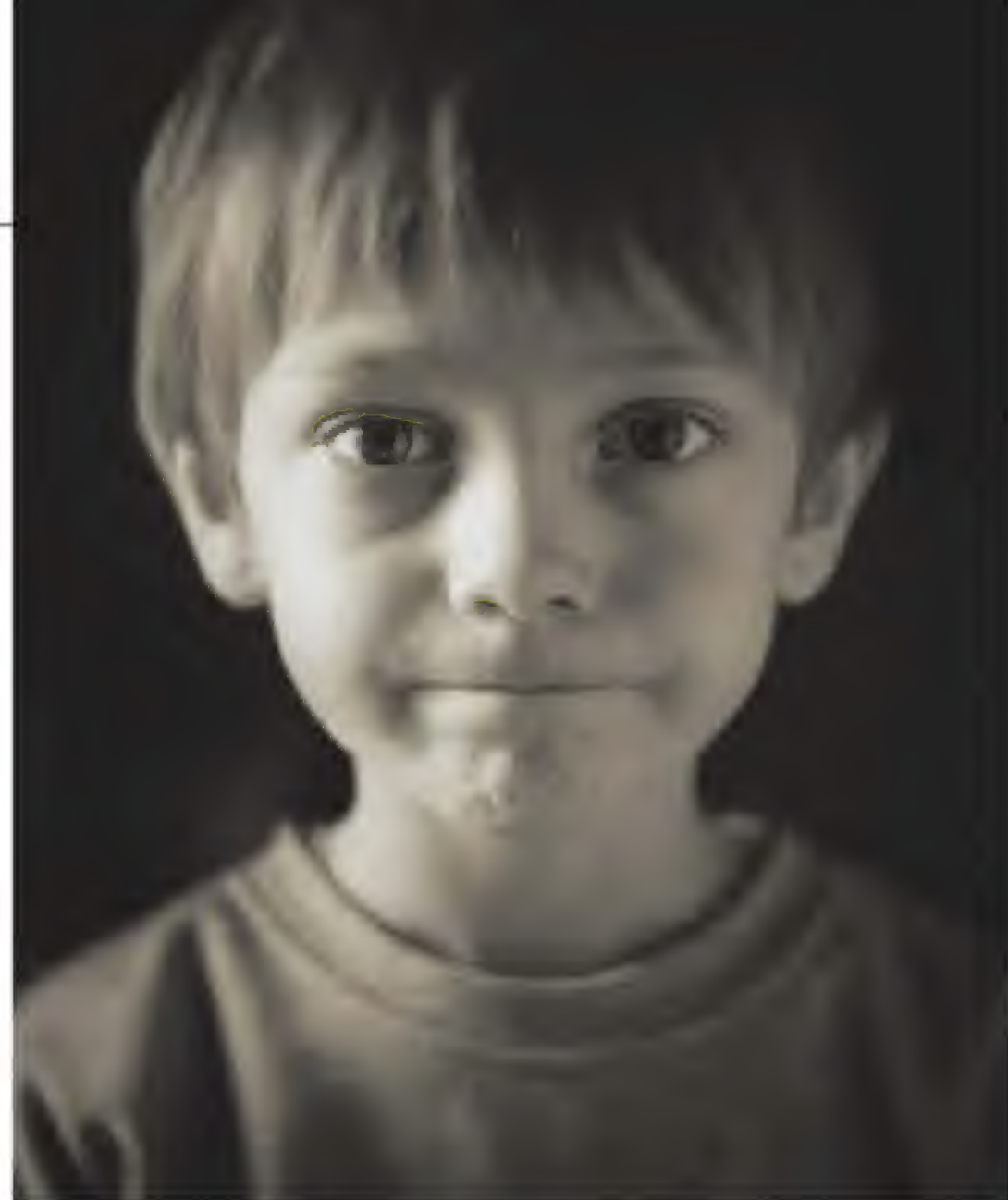
### Do your research

Look at other photographers' work. My photographic hero Irving Penn shot a wonderful book called *Worlds in a Small Room* that sums up the 'top three-quarters' philosophy and remains the perfect example of some of the best studio portraits ever produced. Penn commissioned a tent, with one of the roof panels made of translucent material and travelled around the world with it shooting pictures of indigenous tribes. He would position the tent so that the translucent panel gave him

the ideal light and would then take his pictures. When asked why he did not use electronic flash he replied, 'Because God lights things better than most photographers I've ever met.' Very true, but Penn ensured that he was in control of the daylight and had mastered the art of making it work for him.

Then have a look at a book that changed my life and shaped the way I think about lighting – Robert Freson's *A Taste of France*, published in 1983. It is a marvellous book, which could have been shot this year and is the perfect example of making your 'home studio' wherever you happen to be. The pictures were shot using Nikons, Kodachrome, daylight and reflectors. I assisted Bob a few times on shoots in London back in the dark ages. He was a very cool New Yorker and was the first person I ever saw use one of the flip-out reflectors so common today, and without which no home studio is complete.

So there you have it. A 'studio' is not a building; it's a state of mind. I have been carrying my 'studio' around the world with me for as long as I can remember. It fits easily into the boot of my car and, because I am hard-wired into the concept of simple lighting it gives me all the freedom and control I need in any situation.



## Why it works

### A portrait of a friends' son, Yoan

This was shot in exactly the same spot as the still life of the books using exactly the same lighting (see below). The classic 1,2,3 of light source plus subject and reflector. I could bang on about this for days, but it is genuinely the absolute bedrock of lighting. Why do I think it works? Well, it's impossible to get tired of. It is the absolute classic lighting. It is where I begin every single picture I take. Learn this basic discipline and you need never worry about lighting again. Always remember, your home studio is in your head. You can move your subject, change the background, change the thing you are photographing. You can mess about to your heart's content adding things and putting extra lights up; you can bounce flash around till you are blue in the face but remember the three golden rules – light source, subject, reflector – and always try for the top three-quarters lighting. It is as elementary as the foundations when building a house. Once your foundations are in place you can build any style of house you care for, but without them you are lost.



The resulting picture (above left) shot on my iPhone from mounting a studio at home with a classic lighting set-up of window light and reflector



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# RISING STARS 2018

## New photographers to watch out for



# Josef FitzGerald-Patrick

Outdoor enthusiast Josef swept the board in the youth category of this year's Landscape Photographer of the Year. AP finds out what motivates him

### When did you start taking pictures and why?

I was home-schooled and spent a lot of my spare time outdoors. I've been fortunate enough to grow up in rural Cornwall and so developed a keen interest in nature. Five years ago, at 13 years old, I received my first DSLR and two books by Ross Hoddinott. These inspired me to start shooting both the landscape and wildlife, teaching me so much of what I know today. I was hooked.

### What is it about the landscape that inspires you?

I've always been a keen cyclist, and my bike has been my vehicle for exploring the landscape and finding new locations. The coastline is visually stunning and always changing, with no two days the same, and England's South West Peninsula is full of hidden opportunities: capture



Taken at Land's End, this shot bagged Josef the overall Youth LPOTY prize

these during the golden hour and the result can be stunning.

### Have you entered LPOTY before? How did you go about choosing your images this year?

I entered the competition two years ago and at the time was

disappointed not to have had a result, but when I look back, I don't find it surprising. This year, with an image limit of 25, selecting my entries wasn't too difficult. I had high hopes for the shot of Russ in the Living the View category, but never would have thought I'd take the

overall win. The Milky Way over Porthgwarra Cove was a favourite of my friend and photographer Peter Edwards. I have dedicated it to him, so to see it win the Your View category was amazing.

When Charlie Waite called with the news, it was hard to take in the scale of my win. The interest it has generated has been amazing. I've worked with the BBC and Sky News, receiving so many encouraging comments on social media. It's incredible to see how many people have been inspired and moved by my images.

### What are the biggest challenges you have had to overcome in pursuit of your photography?

Being able to afford professional-level equipment as a young person isn't easy. I relied on learning my own techniques to compensate for only having entry-level kit. All my competition entries and winning images were shot on my first DSLR, the Nikon D3300, paired with the Tokina 11-16mm f/2.8 II lens. I love shooting wide, and the fast aperture is fantastic for my astrophotography work. A few months ago, I upgraded to the Nikon D500, which is already hugely improving my work.

### What are your hopes for the future?

To be able to turn this passion into a career is my dream. I'd love to cover international sporting events. The success of my mountain bike photography has encouraged me to set up a second strand of work, building an audience under the name of CornwallSportsPhotography. Last year, I began running astrophotography workshops as I really enjoy teaching others. With this award, I plan to start running landscape workshops while expanding on the rest of my business, which is JFPimages.

See [www.joseffitzgeraldpatrick.com](http://www.joseffitzgeraldpatrick.com) for more of Josef's work.



This image of the Milky Way over Porthgwarra Cove was awarded the Youth Your View title





# Johan Carlberg

AP talks to 16-year-old Swedish photographer Johan about his images and about winning 2018's Young Bird Photographer of the Year title

## Why and when did you start taking pictures?

I started taking pictures in 2016. Ever since I was a child, I've always spent a lot of time with nature and felt a connection with it. It was when I reached my early teens that I started taking photos of what I saw and experienced in nature. After attending a lecture by a famous nature photographer, I started taking my camera with me everywhere.

## What is it about wildlife that inspires you?

I really believe that you can have a connection with wildlife if you understand it and respect it. You can lose yourself in a special moment when it's only nature and you, and that's a great feeling that truly inspires and motivates me. I want to capture that emotion in my images – when you feel and understand the connection.

## Have you entered Bird POTY before and how did you go about choosing which images to enter?

This was my first time entering the competition. I chose my favourite images from among those I knew many of my friends and family liked, in the hope that the judges would also like them. From seeing all the winning photographs this year, I learned that the judges seem to like creative images of common birds, which I'm all about. I would rather photograph a common bird in beautiful scenery than photograph a rare bird in a boring location.

## What are the biggest challenges you have overcome in pursuit of your photography?

Well, getting up at 3:30am in the summer to get good light takes a lot of discipline and can be quite hard, but that's not the



This stunning portrait won Johan the title of Young Bird Photographer of the Year 2018

© JOHAN CARLBERG

hardest part. One of the most challenging aspects I've faced is getting my pictures published. It took a while, and I wasn't sure what reception I was going to get. Luckily I received a lot of positive feedback, which motivated me and gave me confidence. Even now, I still feel like I've just started with photography, but

now it's more enjoyable because it feels more natural and fluent.

## What kit do you use?

I use a Canon EOS 40D and EOS 7D Mark II. My go-to lens is the Canon EF 100-400mm f/4.5-5.6L IS USM – it's versatile and the quality is excellent. Pair that with the 7D Mark II and I've got a killer set-up for wildlife photography. Last year my father and I invested in the Canon EOS-1DX Mark II, which is just the perfect camera for wildlife and birds, but it's not crucial to have that kind of gear to take great images.

## What are your hopes for the future?

My plans are to be able to continue working alongside nature. I want to show my generation the beauty and importance of nature, ecosystems and wildlife and why we need to protect them. I want to do something that I'm passionate about, and my passion right now is this and probably always will be.

Follow @johancarlbergphoto on Instagram to see more of his work.

Johan wants to continue capturing the beauty of nature and wildlife



© JOHAN CARLBERG





# Harry Skeggs

AP talks to Harry, primarily a nature and wildlife photographer whose work has been in magazines such as *National Geographic Traveller* (UK)

## When and why did you start taking photographs?

I started relatively late, at about 18. I had ambitions of being a painter but I fell in love with travelling. I picked up a camera almost as an afterthought and, to begin with, I was absolutely terrible. But as soon as I fail at something, mastering it becomes an obsession.

## Why do you love wildlife photography?

I have always loved wildlife. We grew up in a very dog-minded house so animals were very much equals, not pets. These days, I feel stronger about animals, as I learn more about their incredible lives but also about the threats we are creating. My work focuses more on animals in their environment – after all, it is this relationship that we are destroying.

## Did you have any professional training?

Photographically I am entirely self-taught. I studied art history at university, but in terms of how to take a photo

I learned it by picking up a camera and failing. I still make mistakes, just hopefully not the same ones.

## What has been your biggest obstacle in your pursuit of photography?

The difficulty of travel/nature photography is sustaining it as a viable business. The expenses involved are huge, with flights and accommodation, plus jaw-droppingly expensive telephoto lenses. The key for me was, surprisingly, to concentrate less on profit but more on minimising expenses. By leveraging my social media I am able to work with amazing brands via sponsorships and exchanges such that I can travel on a completely cost-free basis.

## Who are your biggest influences?

David Attenborough really drove home the beauty and importance of wildlife. If my work could do a single per cent of what he has done towards conservation efforts that would be humbling. The other would be the fine-art photographer



Harry is always keen to show emotion and intelligence in his animal subjects



This atmospheric photo of an egret was taken handheld from a moving boat

David Yarrow. He has almost single-handedly pulled wildlife photography into the upper echelons of gallery fine art and, alongside it, has been relentless in using it to promote charitable causes.

## What kit do you use?

I have been a Nikon shooter ever since I first picked up a camera. My kit has evolved a lot since then: having started with a second-hand D40, I now use the incredible D850 and the exciting new Z series. Nikon has never let me down – I can always rely on it to deliver the best results. The lenses allow for crystal sharpness and that is something that can only be described as addictive.

## What are your hopes for the future?

I am gradually moving away from editorial work and more towards fine art work. This is an exciting new avenue because it allows me to be bigger and

bolder. I believe that photography is very much an art form, as painting and sculpture are. I am also fortunate to have fantastic representation through the likes of Eunice Olumide.

## What advice would you offer to other aspiring wildlife photographers?

I think the real challenge is getting noticed. Virtually everyone has access to a camera and today people can travel on an unprecedented scale, so wildlife photography is no longer purely for professionals. The key is to try to look at things a little differently. Get high, get low, play games with your photography – do anything to change the perspective of what you see and this will help you to be different. Don't be afraid to make mistakes: better to try and fail than be safe.

Harry leads workshops around the world. For upcoming dates, see [harryskeggs.co.uk](http://harryskeggs.co.uk).





# Mary Gelman

Mary won the Newcomer prize at the Leica Oskar Barnack Awards 2018 for her series 'Svetlana', about a facility near St Petersburg. She talks to AP

## When, and why, did you start taking photographs?

I came to photography from science. My first degree is sociology and it influenced me. I was worried about a lot in the world, but mainly topics of gender and discrimination. I observed different situations, interviewed various people and I took pictures on my mobile phone. Later, I bought my first camera with financial help from my mother.

## Tell us more about your photographic education.

I studied in a school of modern photography. It was a time for big questions, like, 'What worries me in photography?', 'What do I want to say?' and so on. I did my first project about domestic violence in Russia, receiving support from the

curator Mikhail Domozhilov. I also took part in various workshops including one on Russian reporting with Andrey Polikanov. It gave me the ability to quickly find a topic and to figure out how to shoot a story.

## Why does documentary photography appeal to you?

The possibility to share with society what worries me and what I consider socially important. I open new areas every time and immerse myself within them; I live through situations with other people, so I'm compassionate. It's something inexpressible.

## What has been your biggest obstacle in your pursuit of photography?

My projects capture, inspire



© MARY GELMAN

and absorb me completely. The big obstacle is to keep a balance and not to forget about myself. To have a rest, and care about my mental and physical condition. I spend a lot of time meditating, taking body lessons and sport, walking in nature, and I often visit the Gulf of Finland.

## Who would you say are your biggest influences?

My biggest influences are from art. I watch a lot of movies and it greatly influences me visually. I love the visual language of Roy Andersson,

the depth of stories of Ingmar Bergman and the topics of Ruben Östlund and Greta Gerwig.

## What kind of kit do you typically use?

I have a Canon EOS 6D with 35mm and 50mm lenses, artificial light, memory cards, a tripod and spare batteries. Recently I got a Leica M10.

## What are your hopes for the future?

I would like to continue to work on my visual investigations, working as a photojournalist and teaching at the same time. I would like to grow as a visual artist (try to work with different formats), because I think with every new project you should change and open yourself – and you won't move forward if you don't become different.

## Do you have a dream assignment?

I would like to do a story about self-organised groups or initiatives of women (or men) across different countries, who resist domestic violence on an everyday level.

## What piece of advice would you offer to other aspiring photojournalists?

To believe in your stories, make a powerful final selection, try to think outside the box and be passionate about your topic.

See [www.marygelman.com](http://www.marygelman.com) for more of Mary's images and for more about her work.

Mary's 'Svetlana' project depicts a Russian community designed for people with special needs or disabilities to live and work in, free of any prejudice



© MARY GELMAN





# Tracy Kidd

AP talks to Tracy about her photography journey to date and her recent success in the Kennel Club's Dog Photographer of the Year competition

## Why and when did you start taking pictures?

My interest in photography started as a child. I used to develop prints with my grandad in his make-shift darkroom at home, by counting elephants for exposure time. He bought me my first camera – a Minolta – for my 21st birthday. I had a successful career as a hairdresser, but at the age of 40 I made it my mission to become the best photographer I could be. This is when I really started to learn. I took a couple of courses and practised as much as I could. You can't be a hairdresser one day and a photographer the next. You need to gain people's trust and the only way to do that is to show them what you can do. I decided to specialise in a genre that I loved. I have horses, so my photography naturally went in that direction, and then the dogs came with all the country sports I followed. Now at 48, I have a photography business I am proud of. Winning the

Dogs at Work category at the Kennel Club's Dog Photographer of the Year contest has taken my photography to another level, and I am excited to see where the future will take me.

## What is it about dogs and horses that inspires you?

I love the dog and equestrian world because animals are what they are. They don't mind what they look like and their expressions are natural. The equestrian world is so exciting and the buzz of photographing it is addictive. I have games with myself on how close I can get to galloping horses or how perfectly I can time them jumping. To ride takes an awful lot of skill and watching British Eventing, for example, can literally leave your heart in your mouth. It's the raw excitement I especially love. Dogs are so interesting to photograph because of their pack mentality. They are all different and all have their quirks and I love finding out about their personalities. The



Owning horses herself, Tracy's photography naturally went down the country sports route

passion and skill needed to train dogs inspires me, especially working dogs. The bond they have with humans is what I love to see.

## Have you entered Dog POTY before and how did you go about choosing which images to enter?

It was my first time entering Dog POTY. I chose my personal favourites and the ones I thought fit the brief. I was so pleased when I first found out my image won the Dogs at Work category that my jaw ached from the permanent smile I had for at least a month.

## What are the biggest challenges you have overcome in pursuit of your photography?

Proving myself, especially to those who thought I was crazy for changing my career. Also being brave and putting myself in situations that scared the bejesus out of me. This is my favourite quote (it's by Ellen Johnson Sirleaf) and I think of it every day: 'The size of your dreams must always exceed your current capacity to achieve them. If your dreams do not scare you, they are not

big enough.' If you are passionate enough and work hard enough they come true, or at least they have done for me.

## What kit do you use?

I have two Nikon D800 cameras and my new baby, the D850. I use a 16-24mm f/2.8, 24-70mm f/2.8, 70-200mm VR f/2.8, 50mm f/1.8 and 85mm f/1.4. Plus I can't live without my Magmod.

## What are your hopes for the future?

To be a Nikon Ambassador in the equestrian/dog countryside sport world. I also want to continually improve my work and keep learning and encourage people to print their photographs instead of storing them on phones, tablets and computers. A fine art, framed giclée print (which is what I produce if you commission me) is there forever. An image on a phone is discarded and constantly replaced. I want to increase my fine art business and have my work hanging on walls. And last but not least, win the overall title at Dog POTY.

See more of Tracy's photography at [www.tracykiddphotography.zenfolio.com](http://www.tracykiddphotography.zenfolio.com)



Tracy won the Dogs at Work category at Dog POTY 2018 with this group shot





# Skye Meaker

Skye Meaker won this year's Young Wildlife Photographer of the Year title. He talks to us about his love of the big five - and other animals

## How long have you been taking pictures?

My dad is a keen photographer, so I took my first pictures when I was seven years old, and started to take photography seriously two years later. Early on, photography was simply a hobby, albeit a passionate one, but as I grew older and as my photography improved, I realised that this was something I wanted to pursue.

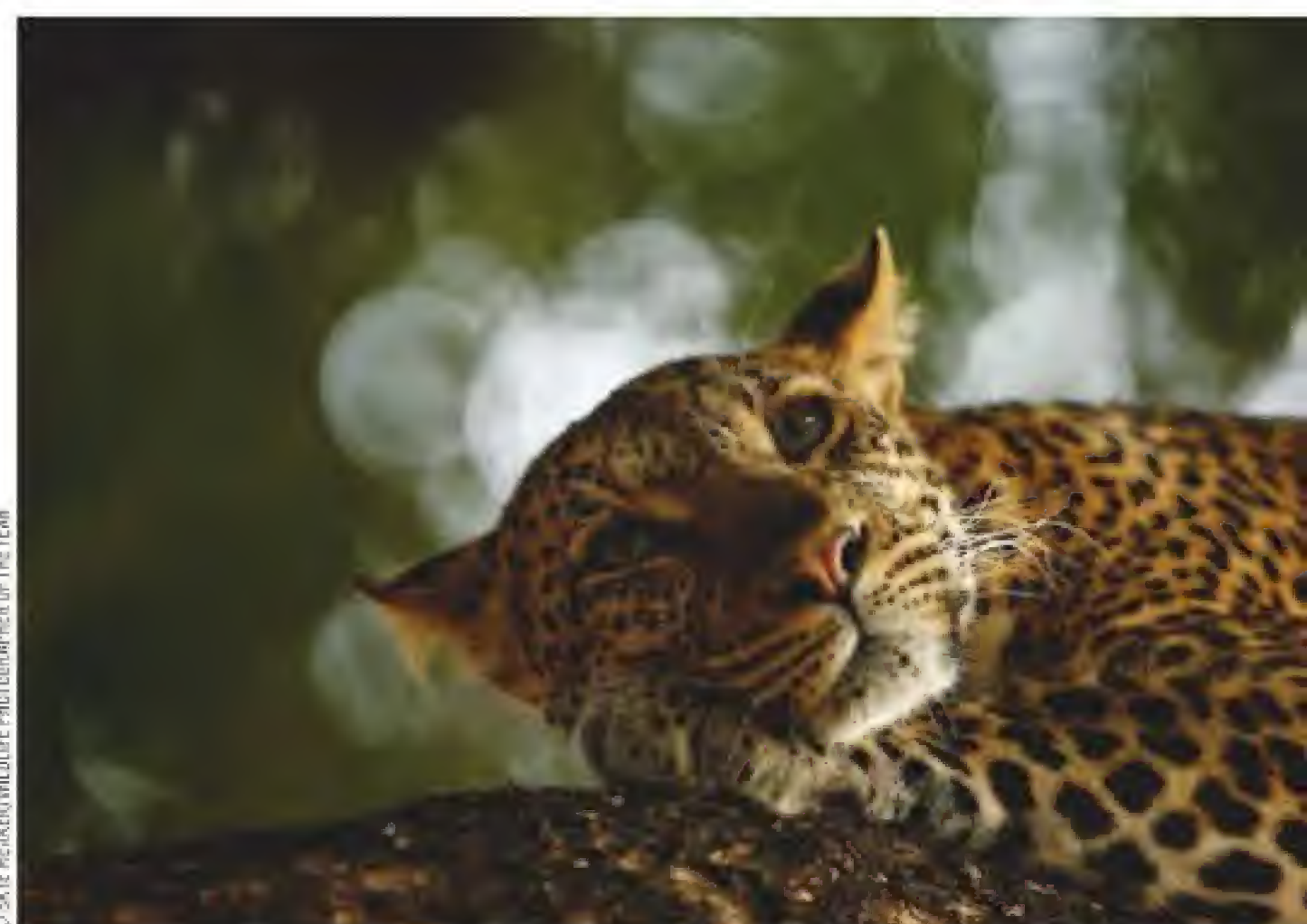
## You live in the city, so how do you get to the wildlife reserves?

I live in South Africa so nature is on our doorstep. I'm surrounded by it, but we usually spend around two months a year in the bush. We have timeshares in a place in southern Botswana called Mashatu Game Reserve, and

this is where I spend most of my time photographing. It takes about 14 hours to get there from where I live.

## You've got some quite serious kit - a Canon EOS-1D X and 500mm lens. Why have you chosen this?

I started with hand-me-downs from my parents, and a disposable camera, and as I got older I got bigger and better hand-me-downs. When I first entered the WPOTY competition a couple of years ago, I was a finalist in the under-14 category, so my dad bought me the EOS-1D X as a present. Then for my 16th birthday I got the 500mm [Canon EF 500mm f/4L IS II USM]. My dad said, 'You can have a car or you can have a lens.' I picked the lens.



Skye's portrait of a well-known leopard in Mashatu Game Reserve won him the title of Young Wildlife Photographer of the Year

## What subjects are most important to you?

I love taking photos of the big five, but will never turn down a good photographic opportunity no matter the subject. I would really love to get a picture of a pangolin, but haven't yet seen one in the wild. My whole goal with photography is to show the beauty of our natural world and how we need to be protecting it, not destroying it. I don't really set myself projects as such, because in the bush in Africa nothing is guaranteed. I prefer to learn about my subjects by witnessing their behaviours

and traits, in order to get the best photo I can.

## Tell us about the leopard in your WPOTY-winning image.

I've known her since she was very young - I think she's about eight years old now. Because she broke her leg when she was a cub, her name is Limpy, and she has to hunt twice as hard as all the other animals because she gets her kills stolen. When I saw her sleeping in the branch, we drove around the tree a couple of times. I liked the background, but the light wasn't quite right, and I knew if she moved her head a little or if the branch moved, it would be awesome. I waited there for a couple of hours, and it's extremely rare to get such an opportunity with a leopard, especially at this game park. But eventually, both of the things I hoped would happen did happen.

## Are you naturally a patient person?

I don't think patience was even in my vocabulary when I was younger. But because of the things I wanted to see and photograph, I learned that all good things come to those who wait. As I have grown up as a person and matured as a photographer, I have become better at waiting for the perfect moment to take the photo - but it hasn't been easy.



Skye took his first pictures when he was seven. Now, 10 years later, he is becoming established as a wildlife photographer

Visit [www.skyemeaker.com](http://www.skyemeaker.com) to see more of Skye's photography work.



# Inbox

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## LETTER OF THE WEEK

### Return to the fold

Having recently returned to film photography I treated myself to a copy of AP for the first time in many years, the 3 November issue. My copy fell open at the 'Back in the Day' (7Days) feature, which was from the period when I last purchased a copy of AP, I think! Despite an attack of instant nostalgia, the content referred to looked very interesting and I really would have liked to read the articles mentioned.

However, onto the current content: I was pleasantly surprised by the articles, which gave an interesting variety of the technical and the photographic. I was particularly intrigued by the article about photographing the victims of Boko Haram, while Roger Hicks's *Final Analysis* piece had definite shades of 'Ricardo' in the long lost days! Overall the magazine had some of the attributes of the *British Journal of Photography* back when it was a weekly publication with a fine balance of equipment reviews, technical explanations and some good photography and analysis.

The advertisement pages, one of the big reasons for buying AP in the past, were a surprise. I was delighted to see some original advertisers still putting in an appearance. But on the whole, the unusual and quirky ads seem to have disappeared, along with those curious lineage classifieds – something of a loss I fear.

All told it has been a delight to return to the AP fold. I just hope that the printed edition remains on the newsagents' shelves. The tactile copy is always a pleasure to hold and read, just as a photographic print is more pleasing to view than a screen image. Keep up the good work!

**John Tarrant**

Thanks for your kind comments, John. I hope you continue to enjoy the AP of today – **Nigel Atherton, Editor**

# Win!

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**32 EVO Plus**

### Conspiracy theory

I would like to add my voice to those calling for AP to find ways to increase participation in the APOY contest. As someone who has entered the competition for the past few years and always done poorly, I took comfort in the past from the belief that my photographs were simply swamped in the vast numbers of entries. This year as I do poorly

both in the public vote and the critics' views, it leaves me with nowhere to hide from the truth.

Now of course, I realise that this year's contest demonstrates that the public are incapable of recognising towering genius, and that the critics are in the pocket of the mirrorless camera lobby and clearly members of the Illuminati, conspiring to cheat me of success.

But what of those more

mediocre enthusiasts, whose egos may be more fragile? They may start to believe that their work simply didn't impress enough people. Spare a thought for them. I worry that without successfully increasing participation next year, these poor souls may become irrational when they see their Photocrowd ratings, and the last thing we need in these troubled times is to cause yet more frustration and despair.

I hope that AP gets to resolving this problem immediately. I do not like hyperbole, so I trust you will agree that this is probably the single most important issue we face in the UK today.

**Mrs Trellis**

### GDPR confusion

There are photographers whom I know are finding it difficult to interpret the data protection act as it applies to street photography. This is due to there being so many grey areas, making it hard to know if one is breaking the law. For example, if I take a picture of a town square with a few people in it do I obscure all the faces that are recognisable in order to enter it into competitions, or do I have to get permission from all these people? There are other examples I could give, but that would take up too much space in your excellent publication. So I hope you might be able to shed some light on the matter as I am sure there are others who are like-minded.

**Matthew Fallows**

**Relax, Matthew. The GDPR rules are about data. Faces in a crowd are not data, but their names, addresses, telephone numbers, bank details and so forth ARE. So if you collect any of this information about the people you photograph (as you probably would if you're a professional) then the new rules apply to you. If you're simply an amateur street photographer shooting candid, then you can go about your business – Nigel Atherton, Editor**

### Early digicam

My first digicam was a Kodak DC4800; it had very few pixels but it came bundled with Adobe Photoshop 6 for a pretty competitive price. Next came an Olympus C-5050 Zoom, which I used for several years for family snaps. The picture above would



**Michael took this shot about 14 years back with his Olympus C-5050Z**

have been taken around 2005 or 2006. It was shot at ISO 64, 1/100sec at f/4, and is a pretty straight mono conversion with minimal sharpening. I think it still stands up well in terms of image quality.

Of course, the main problem with early digicams (for me) was shutter lag among other things; cameras have improved enormously and really, there's not a great deal to complain about these days. It's difficult to buy a bad camera unless your sideline is pixel peeping. We actually still have the Olympus.

**Michael Finch**

### AP's WWI commemoration

Congratulations to the AP team for the 10-page commemoration coverage of the WWI armistice centenary (AP 10 November). The shocking yet vivid images shown give only a glimpse of the horrors men faced. The fact that so many pictures survived despite the strict ban in 1914 on troops using cameras on the front line, as the article says, is a revelation like no other in reality terms.

One of the fears then was about the risk to field intelligence if soldiers were captured with films or cameras in their possession. Likewise, in WWII, troops were taking risks of harsh punishment for having a camera. Some took a chance and in one known case an officer with a Leica managed a series of shots at one of the beach landings in Normandy, more by luck than judgement. His camera still exists and is operational despite rough handling at the time. Pictures more than a century old may not be to any known current



standard but the imagery portrayed plays a precious part in our nation's history.

**Colin Fraser**

### Irving Penn recreation

I want to offer my congratulations to both Andrew Sydenham and Hollie Latham Hucker for their extraordinary efforts in recreating the Irving Penn classic (*Classics revisited*, AP 1 December).

While not a Penn scholar but still familiar with the picture I was at first confused as to which was the original, such was the quality of their version. If I'm honest, and I know this will be photographic heresy, I think I actually prefer the recreation: the fine detail is much more pronounced (due in part to modern technology, I'm sure), there are fewer small distractions (Ms Russell's right shoulder, for example), and there is less blur.

One of the finest examples you've produced so far.

**David Richards**

### Save lightbox from scratches

To help protect a lightbox from scratches, this tip works for me, especially on the newer, thin, USB-powered LED craft lightboxes which are relatively cheap to buy. If you have access to a laminator, laminate an empty pouch. It becomes clear and can be placed on top of the lightbox. Feed the pouch through with it placed on a sheet of card to save it from jamming; then turn the pouch over and feed it again. Seems to work a treat and should work out much cheaper than acetate sheets.

**Duncan Souter**



Andrew would like more lenses from Canon for its EOS R

### Mantra change?

The multiple repeat of 'The best camera is the one you have with you' has now moved from the smiling category to grating. It's time for a change.

It's only the best camera if you know the fundamentals of how to use it. Simply opting for a better camera, for example, in the expectation that your results will automatically improve is another of the many photography fairy tales still widely believed.

A recent demonstration by an award-winning amateur left a lasting impression. He managed to adjust his camera to preferred 'ready now' settings while talking non-stop to the audience. It was second nature, instinctive and a clear sign of adept handling. Contrast this scene to ones where there's a shooting opportunity spoiled by people fumbling with everything from a smartphone to top-end DSLRs.

Let's move on. The new outlook should be, 'The best camera is the one you understand most'.

**Mike Shaw**

### Where are the lenses?

There have been comments concerning the new Canon full-frame EOS R and how we must all buy one, but where are the new lenses for this camera?

I don't like using zoom lenses, and the 50mm f/1.2 will be too heavy for me to take out on my bike. Where is the 50mm f/1.8 or f/1.4? Come on Canon, get real.

**Andrew S Redding**

We were fairly lukewarm about the EOS R in our review, Andrew, but to be fair to Canon its initial release of four lenses was designed to show the breadth of what the system

is able to offer. So it launched with two primes and two zooms, with one of each being superfast-aperture versions. Like any new system it will take time to build. In the meantime you can use existing lenses with the adapter. Or better still, wait for the next generation of cameras to see how they develop – **Nigel Atherton, Editor**

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AF-S Fisheye 8-15mm f/3.5-4.5E ED	£90.00
AF-S NIKKOR 70-200mm f/2.8E FL ED VR	£275.00
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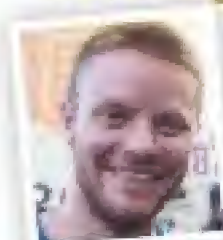


# Reader Portfolio

Spotlight on readers' excellent images and how they captured them



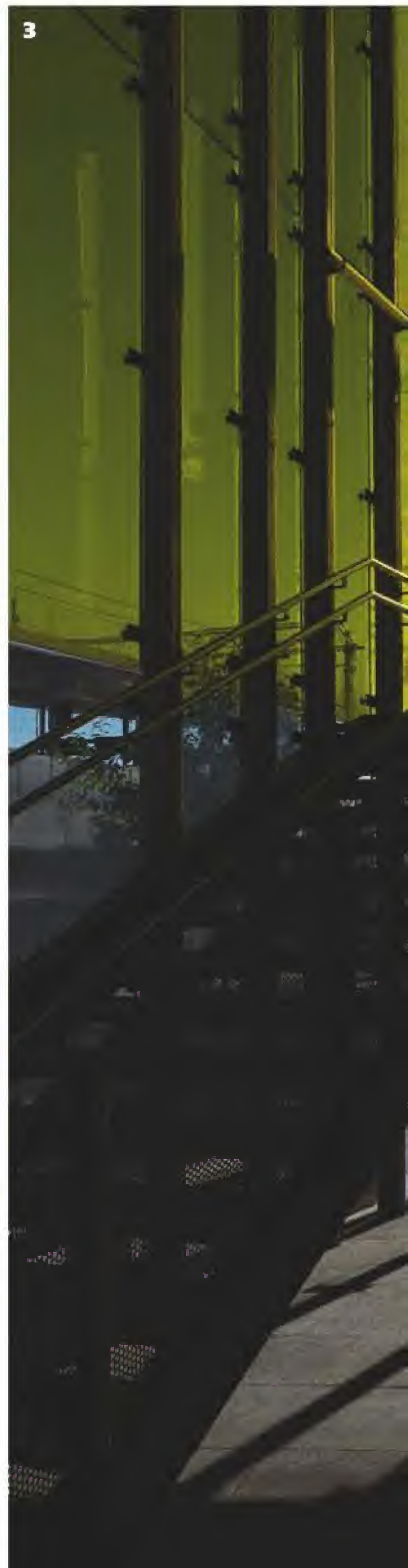
## Henning Pettersen, Norway



Thirty-six-year-old Henning Pettersen, who lives not far from the centre of Oslo, bought his first camera a few years ago. He found himself drawn to a wide range of subjects – and particularly studies the way in which light interacts with a scene. The first time he picked up a camera he was instantly hooked, and has continued to look for unusual ways to portray everyday subjects. All the images in this portfolio were taken at Oslo's Lysaker train station. See more of his intriguing work at [www.henningspettersen.com](http://www.henningspettersen.com).

**1** 'The low sun was casting shadows on the concrete wall, which had some interesting signs and graffiti. I noticed this man walking by and took a quick photo.'  
Leica Q, 28mm, 1/200sec at f/9, ISO 200

**2** 'It was a very cold early morning and the frost on the glass gave the whole area a very special light and mood. I captured these silhouettes as people passed in front of the glass.'  
Ricoh GR, 1/640sec at f/6.3, ISO 800





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# Manfrotto The Reader Portfolio

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**3** 'I stood underneath this stairway for several minutes to see if something interesting might happen in front of the green glass, when this woman with a fan came along. I wanted to capture the contrast between the inner and outer areas of the stairway.'  
Leica Q, 28 mm, 1/250sec at f/13, ISO 100

**4** 'I took this picture on the escalator that leads up to the train tracks. The sun created this lovely triangle on the wall, and I waited until I was able to capture people going up and down at the same time.'  
Ricoh GR, 18.3mm, 1/1500sec at f/5, ISO 400

**5** 'Looking up at the stairway leading to the overpass. I noticed the sky reflected in the yellow-green glass wall in the background. I composed so it almost looks like a beam of light coming in from the top.'  
Sony Alpha 7 II, 55mm, 1/1250sec at f/6.3, ISO 100





Panorama stitching is a great technique to use to extend your angle of view



## Martin Evening

Martin is a photographer and is known for his in-depth knowledge of Photoshop and Lightroom and as an author on digital imaging. His recent books include *Photoshop CC 2018 for Photographers* and *The Adobe Photoshop Lightroom Classic CC Book*. [www.photoshopforphotographers.com](http://www.photoshopforphotographers.com)

# Panorama no drama

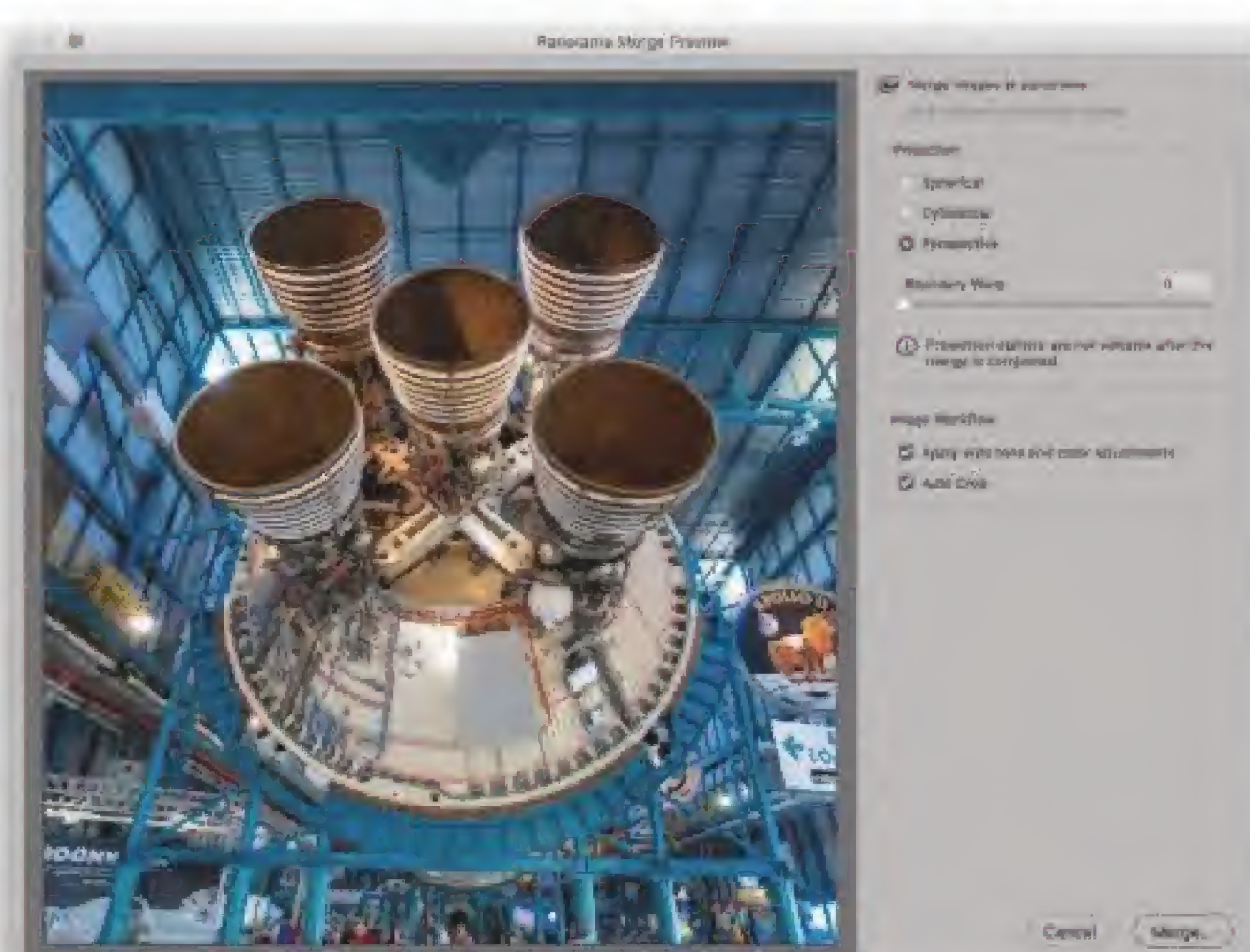
Photoshop's powerful panorama-building feature will extend the capture angle of your camera.  
**Martin Evening** shows you how

**F**or those times where you find yourself squeezed for space, or lacking a wide enough lens, panorama stitching is a great technique to use if you wish to extend the angle of view, or you simply want to capture more pixels or create sharper images. There are a number of programs out there you can use, including smartphone apps, and not least the highly acclaimed PTGui. But both Photoshop and Lightroom have powerful panorama-building features, including the Panorama Photo Merge in Camera Raw.

When photographing a sequence of individual photos that you intend to stitch together, it helps if you capture a significant overlap between each one. Ideally, the photos should be shot







## Creating panoramas of architectural subjects

The Perspective mode is the best option to choose when using the Camera Raw Panorama Photo Merge method to process architectural subjects. This is because the Perspective projection method ensures that straight edges remain straight and you most certainly would not want to apply a Boundary Warp adjustment to expand the image. Even though the preview may show some perspective distortion, this can easily be corrected using the Transform controls to adjust either the Vertical or Horizontal transform sliders. In the example shown here I could have subsequently used a Vertical slider adjustment to correct for the keystone perspective in this Panorama Photo Merge.

**To avoid distortion use the Perspective mode to process architectural images**





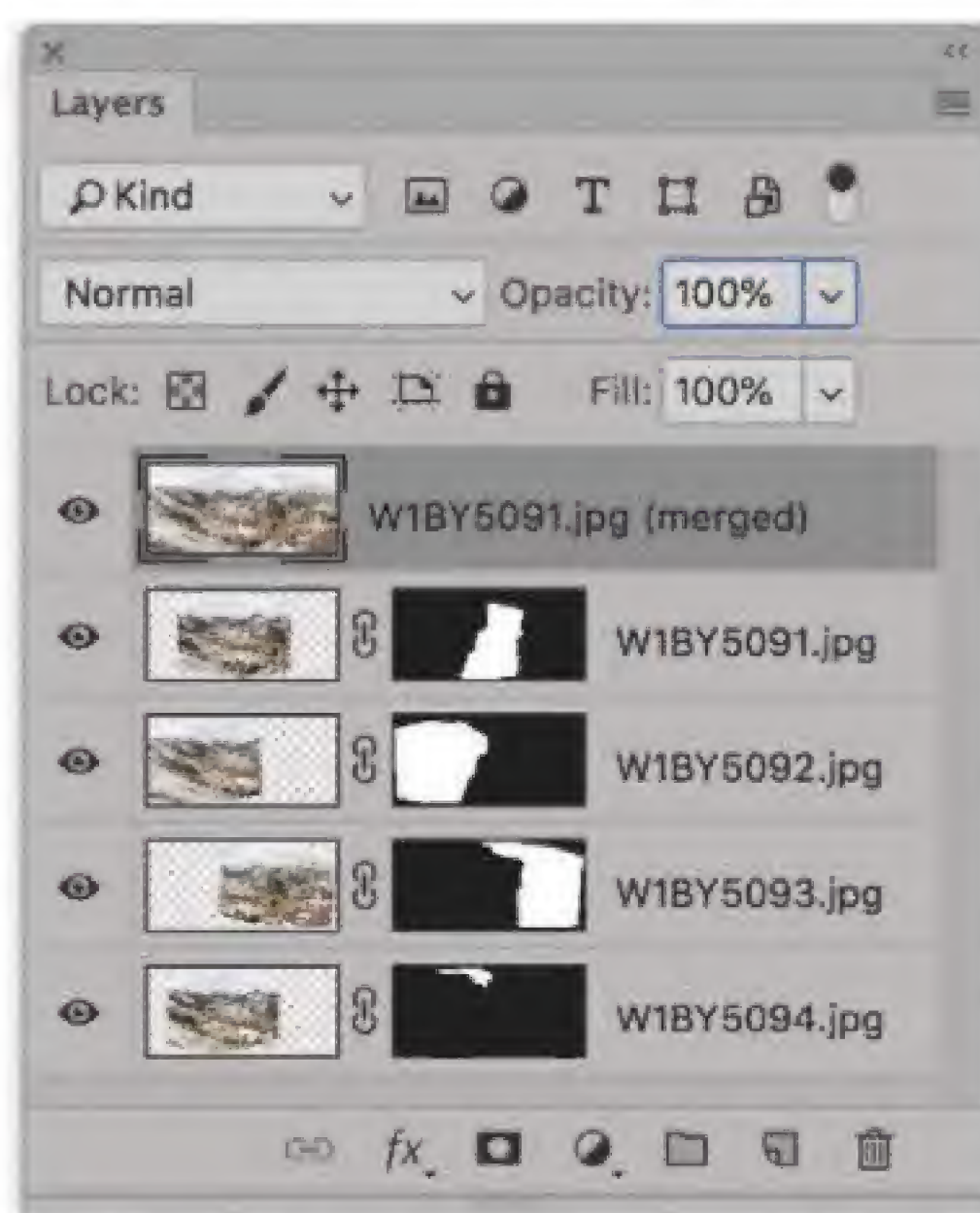
The Cylindrical layout option is great for panoramic landscapes such as this example

➤ using a moderate wideangle lens or longer, and there should be at least a 25% overlap. With extreme wideangle/fisheye lenses you should aim for a 70% overlap. It helps if you have the camera mounted on a tripod or better yet, use a special tripod head that allows you to align the nodal point of the lens to the rotation axis. But you can certainly get good enough results when shooting handheld. Ideally, the exposure setting should be consistent, but even if the photos are captured with a variance of exposure, the Photo Merge process can even these out to a certain extent.

I mostly prefer to use Camera Raw's Merge to Panorama method, which creates DNG panoramas from raw as well as non-raw files. The resulting files are 16-bit integer DNGs, which are demosaiced and saved as raw linear RGB data. Although the images are partially processed, you still retain the ability to apply Develop module edits and update to later process versions as they become available. Lens warp, vignette, and chromatic aberration are



For best results, use a tripod and make sure each exposure is consistent



The Blend Image Together option completes the process and adds a layer mask to each Photomerged layer



Once you've selected your files and chosen your layout you can tick more options to fine-tune the results

## Photoshop Photomerge method

You can also use the Photomerge feature in Photoshop to create panorama images. The best way to do this is to use Bridge to select the photos you wish to process and then choose Photomerge via the Bridge Tools > Photoshop submenu. In most cases the Auto layout option is all you will need to get good-looking panoramas, although the Cylindrical layout option will again work best for panoramic landscapes, such as the example shown here. The Blend Images Together option completes the Photomerge processing as it adds layer masks to each of the Photomerged layers. The Vignette Removal option can help improve the result of the final image blending, especially if you are merging photos that were shot using a wideangle lens. When the Geometric Distortion Correction checkbox is enabled, Photomerge aims to create a better stitch result by directly estimating the lens distortion in the individual image layers. And finally, if you select Content Aware Fill Transparent Areas this adds a merged panorama layer to the layer stack and uses Content-Aware Fill to fill the transparent edges.



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## 'The photomerge method offers an alternative approach to stitching'

➤ automatically applied to the images behind the scenes before stitching, so such settings in the source images, as well as Upright and Crop adjustments are ignored. Other adjustments, such as Basic panel, Tone Curve, Lens Corrections panel defringe adjustments and colour adjustments, are copied though.

### Creating Photomerge DNGs

To create a Panorama Photomerge DNG, make a selection of photos in Adobe Bridge and choose File > Open in Camera Raw. Select all the photos in the Camera Raw Filmstrip and, from the Filmstrip menu, choose Merge to Panorama. This opens the Photomerge Preview dialog, where you can select from three projection methods. In the following steps I used the Cylindrical option. The Spherical mode transforms the photos both horizontally and vertically. This method can be more adaptable when it comes to aligning tricky panoramic sequences. So, for example, when you shoot a sequence of images that consists of two or more rows, a Spherical projection mode may produce better results than the Cylindrical method. The unadjusted preview may appear distorted in shape, but by dragging the Boundary Warp slider to the right you can warp the image to fill the bounds of the image frame. It is worth bearing in mind that Camera Raw-generated panoramas contain the necessary metadata to allow them to later be perspective-corrected using the Adaptive Wide Angle filter in Photoshop CC, should you prefer. Or, you can make use of the Transform controls in Camera Raw to edit the perspective.

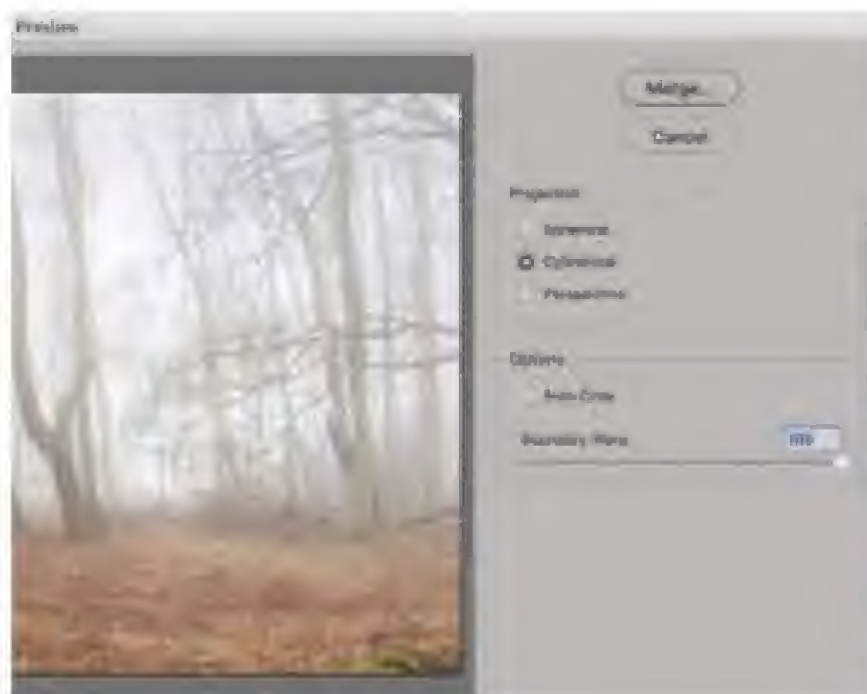
The Photoshop Photomerge method offers an alternative approach. You can access this by selecting the photos in Bridge and choosing Tools > Photoshop > Photomerge. This Photoshop feature predates the Camera Raw method of stitching. However Photomerge processing can sometimes cause the highlight values to clip. You may carefully set the highlight end points at the pre-Photomerge stage, only to find they become clipped in the resulting Photomerge composite. This is why I generally prefer to use the Panorama Photo Merge in Camera Raw and Lightroom, because this method preserves the raw file data and provides you with full control over the tones, and avoids undesired clipping. AP

## CAMERA RAW'S PANORAMA PHOTO MERGE



### 1 Merge to Panorama

Select your raw image files and open them all in Photoshop. As they are raw files, they will automatically open in the Camera Raw hosted plugin. Click on the Filmstrip fly-out menu and choose Merge to Panorama. This will open the Panorama Merge Preview dialog box.



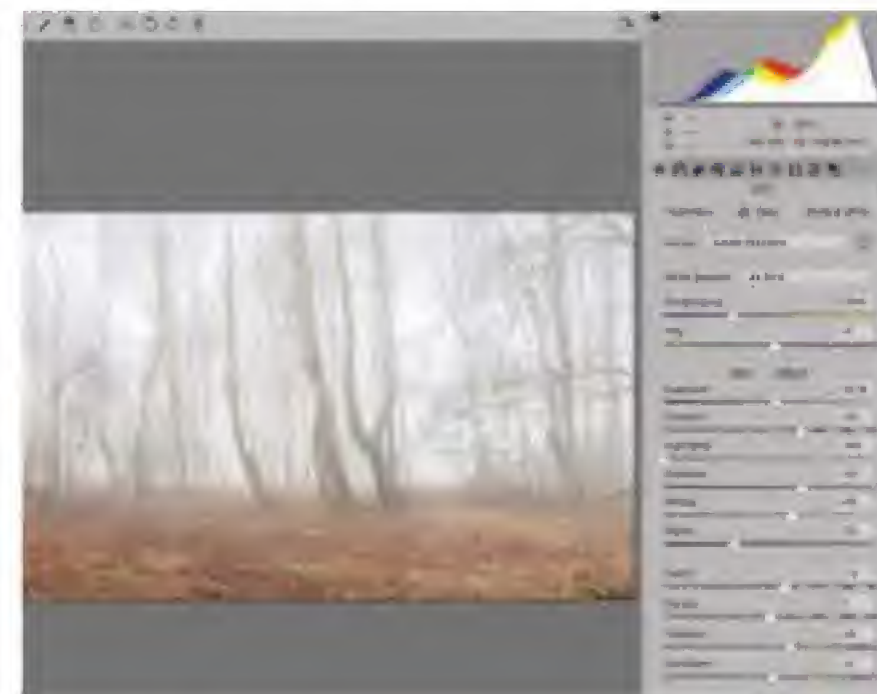
### 3 Boundary Warp

You can adjust the Boundary Warp slider to make the boundary of the panorama fit more closely to the edges of the frame. In my example, I set the Boundary Warp slider to 100% to warp the image and extend it to fit the surrounding rectangular frame.



### 2 Select Projection

Select the desired projection and preview the result before committing to create a full Photo Merge. Here, I selected Cylindrical, which ensured the photos were correctly aligned to the horizontal axis. This mode is particularly appropriate when merging single rows of photographs that make up a super-wide panorama.



### 4 Hit Merge

Click the Merge button in the Panorama Merge Preview dialog to create a full Photo Merge Panorama DNG, which will be added to the Filmstrip and named, based on the most selected image by adding a -Pano suffix. The Develop settings applied here were based on the most selected photo in Step 1.



### 5 Finishing touches

The final step requires fine-tuning the colour and tone settings in the Basic panel. I also added a Graduated Filter adjustment to the top half of the image to darken the highlights and bring out more detail in the trees to produce the finished version shown here.



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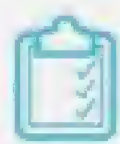
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# Fujifilm XF10

An APS-C sensor in a genuinely pocketable form? **Matt Golowczynski** finds out if Fujifilm's XF10 is too good to be true

## At a glance

£449

- 24.2MP APS-C CMOS sensor
- 28mm equivalent f/2.8 lens
- ISO 200-12,800 (expandable to ISO 100-51,200)
- Up to 6fps continuous shooting
- 3in, 1,040k-dot touchscreen
- 4K video at 15fps
- Wi-Fi and Bluetooth connectivity



## For and against

- + Very small considering its APS-C sensor
- + Fantastic build quality and attention to detail
- + Very pleasing image quality
- + Responsive touchscreen
- + Optical aberrations effectively dealt with in camera
- + USB charging is useful
- Slight overexposure is common
- Sub-standard video quality
- Lagging in operation
- Focusing could be snappier and quieter
- Shallow raw burst depth
- No built-in ND filter

## Data file

Sensor	24.2MP APS-C CMOS sensor
Output size	6000 x 4000 pixels
Lens	18.5mm f/2.8 (28mm equiv)
Shutter speeds	30sec-1/4000sec (mechanical) 30sec-1/16,000 sec (electronic)
Sensitivity	ISO 200-12,800 (standard) ISO 100-51,200 (extended)
Exposure modes	PASM, SR+, Scene
Metering	Multi, Spot, Average
Exposure comp	-5 to +5 EV in 1/3 EV steps
Continuous shooting	6fps
Screen	3in, 1040k-dot LCD touchscreen
Viewfinder	None
AF points	91
Video	4K (15p); Full HD (59.94/50/24/23.98p)
External mic	2.5mm stereo mini connector
Memory card	SD, SDHC, SDXC
Power	NP-95 battery
Battery life	330 shots
Dimensions	112.5 x 64.4 x 41.0mm
Weight	278.9g with battery and card

With budget compact cameras having largely ceded their ground to smartphones, many have suspected that enthusiast compacts would soon be the next casualty. And yet, even with the growing additional threat from affordable mirrorless systems, the format has proved to be remarkably resilient.

Indeed, in some ways it's in better shape than ever. In just this past year, Sony's 1in sensor-toting RX100 line has now ventured towards superzoom territory, with its latest RX100 VI built with an optic equivalent to 24-200mm. Panasonic has finally updated its much-loved four-year-old LX100 with a Mark II model, once again with a Four Thirds sensor at its heart. Fujifilm's most recent contribution was last year's X100F, a model whose stellar

performance is equalled only by its handsomeness.

As capable as these three are, not one can be said to be both affordable and pocketable. So it's refreshing to see Fujifilm introduce the XF10: a camera that manages to satisfy both goals while finding enough space for an APS-C sensor.

## Features

Officially, the XF10 does not appear to be a direct replacement for anything we've seen before, but it sticks to a similar formula as the almost three-year-old X70. While it eschews some of the features that made that model desirable, it offers fresh options and inherits a handful of others from the company's most recent X-series cameras.

Perhaps the biggest internal change from the X70 concerns the sensor. In place of the X70's





The auto white balance system can sometimes struggle under mixed light, as this somewhat cold rendition shows  
Fujifilm XF10, 1/35sec  
at f/2.8, ISO 6400

16.2MP sensor, which was designed with the same X-Trans architecture as those inside many other Fujifilm cameras, the XF10 has been furnished with a more conventional 24.2MP sensor with a Bayer RGB colour filter array. From its specs alone, it appears to be the same sensor as the ones inside the recent X-T100 and X-A5 mirrorless cameras, or a close relation at the very least.

Fitting a sensor of this size in a body so compact is only made possible by partnering it with a fixed-focal-length lens. Here it is an 18.5mm optic, which provides an angle of view equivalent to using a 28mm lens on a full-frame camera.

The lens's f/2.8 maximum aperture is respectable, and the seven-element, five-group design helps to keep it relatively compact, something that's no doubt further helped by two of these elements

bearing aspherical surfaces. A nine-bladed diaphragm should please those intending on frequently capturing images with elements blurred in the background, and while its 10cm minimum focusing distance may seem a little long, this is standard for a camera with such a lens.

Fujifilm has not made reference to any particular processing system here, so it seems unlikely that the model employs one of the X-Processor engines found inside the majority of its more premium cameras. In any case, it enables the camera to shoot images continuously at a maximum 6fps, and also allows videos to be recorded in 4K UHD, although only to a maximum 15fps. Such a low frame rate significantly curbs the feature's appeal, although one advantage this provides is the 4K Burst shooting option, which captures 15fps at 4K UHD

resolution (3840x2160) before allowing you to extract your favourite from the pack.

Those intending to use the camera for video are more likely to call upon the various Full HD options, which record at a range of frame rates up to 60fps, and these are complemented by the now-standard assortment of slow-motion options in standard HD. There's even a microphone port – a bit of a rarity on a camera of this size that lacks a hotshoe – though it's a 2.5mm port rather than the standard 3.5mm.

The XF10's autofocus system combines contrast and phase-detect AF into a single Intelligent Hybrid AF system, and the user is able to manually address 91 individual points. Continuous and manual focus options are also provided, as is a new Snapshot mode. This immediately focuses to a distance of 2m or 5m and

captures the image in a single action, and as this saves the camera from having to focus on a specific subject, it speeds things up when shooting spontaneously. This principle of zone focusing has been in use for some time, of course, although this is the first time it's been implemented on a Fujifilm camera in this manner.

Another new feature is the SQUARE mode. While this is nothing more than a 1:1 aspect ratio shooting option, it's been given greater prominence here, and can be accessed quickly with a swipe of the camera's screen. Ostensibly aimed at anyone with an Instagram account, its appeal will no doubt extend to anyone used to shooting with a 6x6cm medium format film camera.

A slot at the base of the camera accepts SDHC and SDXC memory cards, in addition to older SD types, with support for the





In-camera raw processing allowed highlights to be pulled back and shadows lifted in this high-contrast scene. Fujifilm XF10, 1/90sec at f/5.6, ISO 200

➤ UHS-I bus interface. Wi-Fi and Bluetooth are also both on board, and these allow instant transmission to smart devices and printers, while also providing a way to control your camera remotely.

The XF10 is also equipped with USB 2.0 and microHDMI sockets, in addition to a separate port for a remote. The familiar NP-95 battery provides around 330 frames per charge, which is about average for such a model, and you can conveniently charge this through the camera's USB port.

### Build and handling

Available in black and champagne gold finishes, the XF10's design is decidedly more basic than the company's X100-series models, or indeed, even the previous X70. The camera has been crafted with a more Ricoh GR-esque minimalism, although it's even more stripped down. The front plate is free of the buttons and switches that adorn Fujifilm's similar models, and there are no dedicated shutter speed, ISO or exposure compensation dials that have become synonymous with X-series cameras.

The default set-up does, however, have the top-plate dial adjusting exposure compensation when you're in either Aperture or Shutter Priority modes. Much like the mode dial to its side, it's just a few millimetres tall, and on such a small body it's not comfortable to

operate with the thumb alone, which makes you wonder why it's not embedded within the back plate instead.

In the absence of directional controls or a menu pad control dial on the back plate, it falls to the focus joystick to do much of the menu navigation. Operating so much of the camera this way might not be to everyone's taste, but it's a good use of space and makes a lot of sense. Similarly, some may not warm to the shallow control ring around the lens, and the fact it's de-clicked means it offers no feedback when rotated.

Despite its low price, the XF10's build quality is superb, as is attention to detail. It's easy to form the impression that it's not as robust as its pricier X100-series cousins when you pick it up for the first time, but this is likely more to do with the camera's small size and light weight than the quality of its build. Every dial on the body has been crafted from metal, and this continues to most of the panelling and the majority of the controls. The doors to both the battery compartment and ports appear to be constructed from polycarbonate, but both are finished to complement the surrounding areas, and neither presents any concerns.

### Viewfinder and screen

The XF10's price point makes the absence of a viewfinder

understandable, although there's also no external unit available (and no hotshoe designed into the body that would accommodate it).

Images are composed and viewed on a 3in LCD screen, which has a respectable 1.04 million dots but no option to be physically adjusted in any way for low- or high-angle shooting. Tilting screens are fast becoming a standard feature on cameras of all varieties, and its omission here may displease some, although it's worth noting that the majority of compact cameras with APS-C sensors aimed at a similar audience have precisely the same design.

The LCD screen does a very good job outdoors, and even in brighter light it doesn't appear to suffer like some others do. Its crispness decreases in poorer light as noise begins to take hold, and it lags a little here too, but we would expect performance to drop in such conditions.

The screen is also sensitive to touch, and this can be used to define the focus point or select items in the Q. Menu (which rounds up many commonly used options). It can also be used to swipe through images, though the main menu can only be navigated using the physical controls. The screen is pleasingly responsive when used for most of these tasks, and in good light this makes focusing and triggering the shutter in one action pleasingly prompt.

Perhaps the most impressive way in which this can be used is when playing back images, as the immediate response makes checking fine details and accurate focus in enlarged sections of images quick and convenient.

One recurring issue with the touchscreen is that it's easy to run into the side with your thumb, which is home to a few virtual buttons including one for focusing mode. As this only requires a single press to cycle between

6fps is a perfectly respectable burst rate on such a camera, which makes action captures possible. Fujifilm XF10, 1/1400sec at f/7.1, ISO 200



options, it's a little too easy to accidentally switch to manual or continuous focus without you immediately realising you've done so. Thankfully, you can disable the touchscreen if you find it to be more of a bother than a blessing.

### Performance

The camera starts up in just under a second and powers down in fractionally less time, which is perfectly reasonable for such a model. While the menu isn't quite as comprehensive as those on more premium X-series offerings, its clarity is generally very good, and should ensure that even those new to Fujifilm's GUI can find their way and change settings without needing the manual.

The level of control over autofocus is about as comprehensive as we should expect on such a camera, which is to say very good. Single point, Wide/Tracking, Zone and All options are on offer, with the ability to define specific focusing zones and to adjust the size of single AF points for focusing on smaller subjects. The focus lever makes shifting this point fast and straightforward, although it could do with being more sensitive to diagonal movements.

By the standards of many other compacts the focusing system is a little behind for speed, with just a little too much back-and-forth shifting and general hesitation. For static subjects this isn't too slow to

matter greatly, but it could be problematic for anything else. Conversely, the manual focusing system works very well, with the de-clicked ring around the lens moving smoothly enough for fine adjustments – particularly useful when adjusting focus during video.

Burst shooting is another area where the camera comes unstuck. With a fast UHS-I memory card in place the camera can only manage five raw frames (or simultaneous raw and JPEG frames) at its maximum 6fps speed before it slows. The camera also can't be operated as these are processed, but the fact that there are so few frames to deal with does at least mean that this is over in a matter of seconds. Switch to shooting JPEGs alone and you're rewarded with around 18 or 19 frames captured without any slowdown, which exceeds Fujifilm's own rating of around 13 frames, and these are sent to the memory card quickly enough for the camera to immediately return to operability.

Elsewhere, the camera offers a number of useful touches that you soon appreciate in use. Pressing the Q button when playing back a raw file, for example, helpfully brings up the post-capture raw-processing options. There's also a handy countdown timer that runs during long exposures, plus there's the option to silence all operational sounds in one action.



## Focal points

The XF10 squeezes a lot inside its conveniently sized body. Here we study some other controls

### Fn buttons

There are two Function Buttons on the body: one on the top-plate just to the left of the mode dial and one just to the right of where the right-hand thumb naturally falls, though it's not actually labelled an Fn button. These can both have a particularly broad range of functions assigned to them, including the new SQUARE and Snapshot modes, and will no doubt be appreciated and regularly used by the target audience.

### Control ring

The default function of this ring depends on your shooting mode, although you can customise it to your requirements if you prefer. It can, for example, adjust ISO, Film Simulation, white balance and so on, and it can also be set to manually focus the lens.

### Focus joystick

Fast becoming a standard control on mirrorless cameras and enthusiast compacts, this allows the focusing point to be quickly shifted around the frame. Like many of Fujifilm's other X-series models, it can also be used to quickly navigate the menus and find the settings you need.

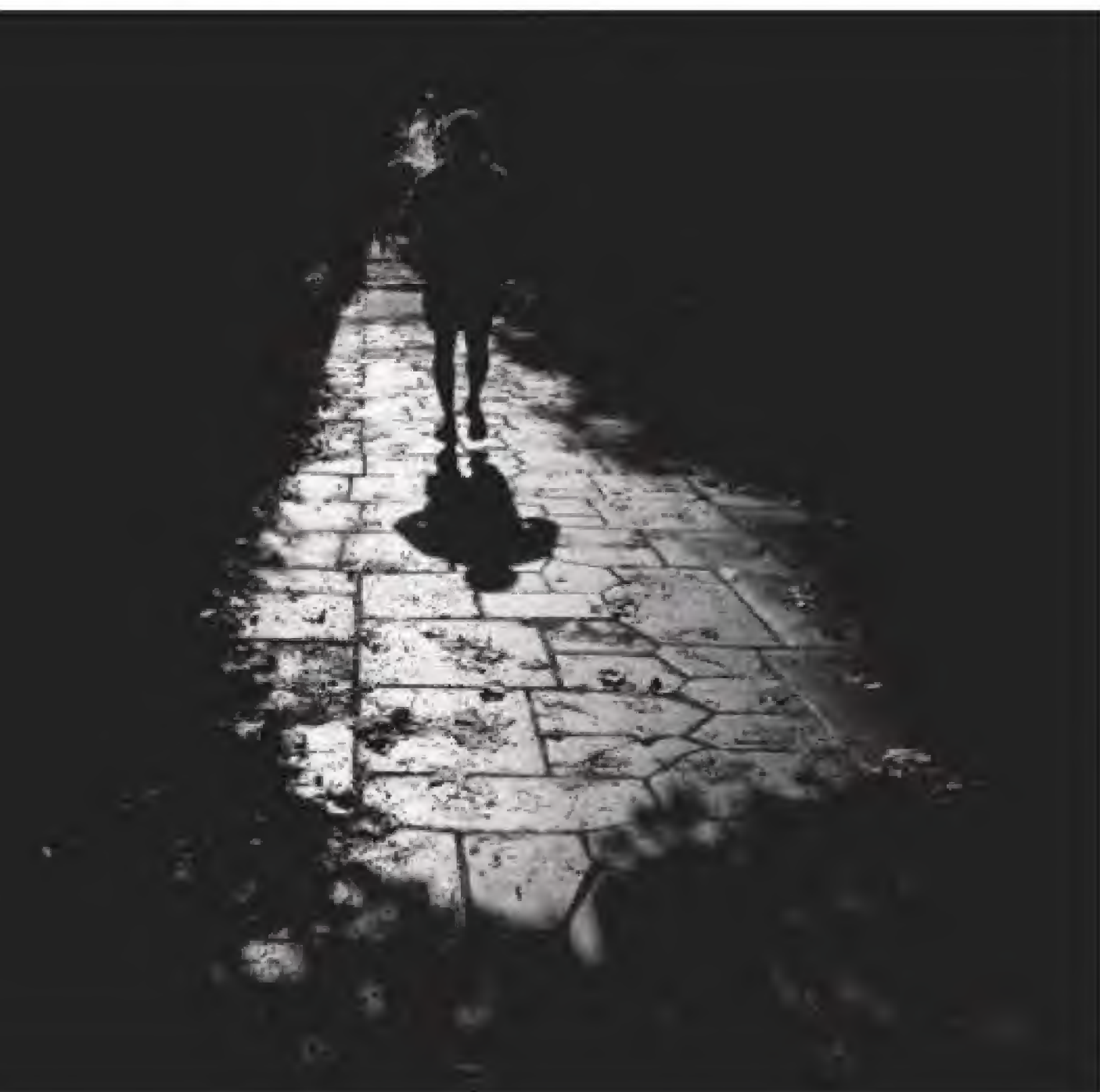


### Flash

The small flash that's embedded in the XF10's front plate offers a guide number of 5.26m at ISO 100, which is on a par with similar models. The usual options we expect to see, such as slow-sync and second-curtain sync, are all present and available to be used when required.

### Touchscreen

You can use this to trigger the autofocus systems in both stills and video recording, and to focus and expose the image at once. Film Simulation and scene modes can also be changed this way, and additional functions can also be assigned to up, down, left and right swipes. Upon playback, you can swipe it to browse images and pinch-zoom to check details.







The lack of a built-in ND filter is a shame, but freestyling with a separate filter can yield pleasing long exposures  
**Fujifilm XF10, 4sec at f/16, ISO 200**

# Film Simulation modes

FILM Simulation modes are now a standard part of most of Fujifilm cameras, with only the cheapest compacts unlucky enough to miss out on them. Drawing on the company's heritage in film production, these are designed to emulate some of the company's most popular emulsions such as Provia, Velvia and Astia, the former being the default 'Standard' option.

The remaining options that make up the collection are also not necessarily tied to a specific film. Classic Chrome, for example, delivers more muted colours that are reminiscent of documentary images, while Pro Neg Std and Pro Neg Hi are intended for portraiture under different kinds of light. Monochrome and Sepia options are also on hand.

Variations of the Monochrome option with red, green and yellow

filters can be chosen to suit the scene too, although a more recent Acros setting, which is designed to replicate the Neopan Acros emulsion, has not been included here. Given that this has also been left out of the entry-level X-A5 and X-T100 mirrorless cameras, it appears that Fujifilm simply wishes to reserve this for its pricier models.

If you happen to be capturing raw files, you can also adjust these options when using the post-capture raw-processing feature. These Simulations are also available in Adobe Lightroom CC and Camera Raw programs among others. While the Advanced Filters that sit alongside these options may not be to everyone's taste – think Fish Eye, Toy Camera and so on – Fujifilm had added two slightly more sober options to the

previous collection for the XF10. The Rich & Fine option applies a light vignette and intensifies colours in the centre of the frame, while the Monochrome [NIR] setting is intended to simulate black & white images captured by near-infrared cameras.

Considering the absence of any kind of image stabilisation system, it's also very welcome to have the option to determine a minimum shutter speed when using one of three Auto ISO options (the upper limits can be adjusted to preference). This is particularly useful to find here because the default minimum shutter speed of 1/28sec doesn't always deliver the crispest images when viewed at 100%.

Elsewhere, however, a number of things frustrate. The Snapshot feature has the effect of closing down the aperture to f/8 when shooting at 2m and f/5.6 when set to the 5m option. The likely logic to this is to ensure that if your subject isn't quite 2m or 5m away, the depth of field at these apertures will still render it in focus, although the fact that this can't be overridden does mean your shutter speed can suddenly drop if you tend to use Aperture Priority, or anything other than Manual or Shutter Priority. Spontaneous shots often require fast shutter speeds, so it's a shame there's no way to bypass this.

Given that it's the only one you're able to use, the quality of the lens on such a camera is paramount. Wide open at f/2.8, details are very good in the centre of the frame and they continue to be rendered well up to the peripheries, though corners show

a touch of softness. This is only minor, though, and improves when you start to stop down.

A profile built into the camera's raw files automatically banishes chromatic aberration and vignetting, and this clearly works well, with neither being a concern. Curvilinear distortion is also very well controlled; there's no barrel distortion at all, and the slight unevenness towards edges of the frame is potentially down to a combination of the aspherical elements in the optic and further processing than anything else.

While the metering system doesn't throw up any surprises, it does seem to lean slightly towards overexposure. This can be welcome in scenes with many shadow details, although it does affect the ability to hold on to highlight detail and can make colours less vibrant. Adjusting this as you shoot is easy to do, though.

The camera's auto white balance system generally does well, but there were a handful of occasions where it was easily persuaded to deliver a noticeably cooler or warmer rendition of a scene than the one immediately captured before it, even if the conditions had stayed the same.

The 15fps limitation of videos captured in 4K mean that, while detailed, they more closely resemble stop-motion footage than anything else. Full HD at 60fps yields better footage.





# Lab results

Andrew Sydenham's lab tests reveal just how the camera performs

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Image Engineering

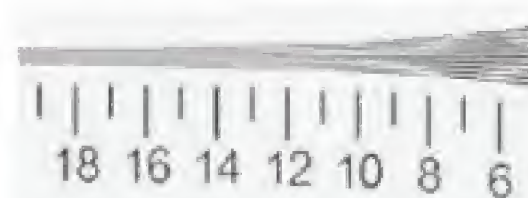


Rather than using Fujifilm's X-Trans CMOS technology, the XF10 employs a 24.2MP APS-C sensor with a standard Bayer colour filter array. While it's not entirely clear whether the sensor is the same one as featured inside the XT100 and X-A5, it does at least appear to behave in a similar way. The best performance comes between ISO 200 and 1600, with good detail and relatively little noise, although results up to ISO 6400 are perfectly usable at smaller sizes.

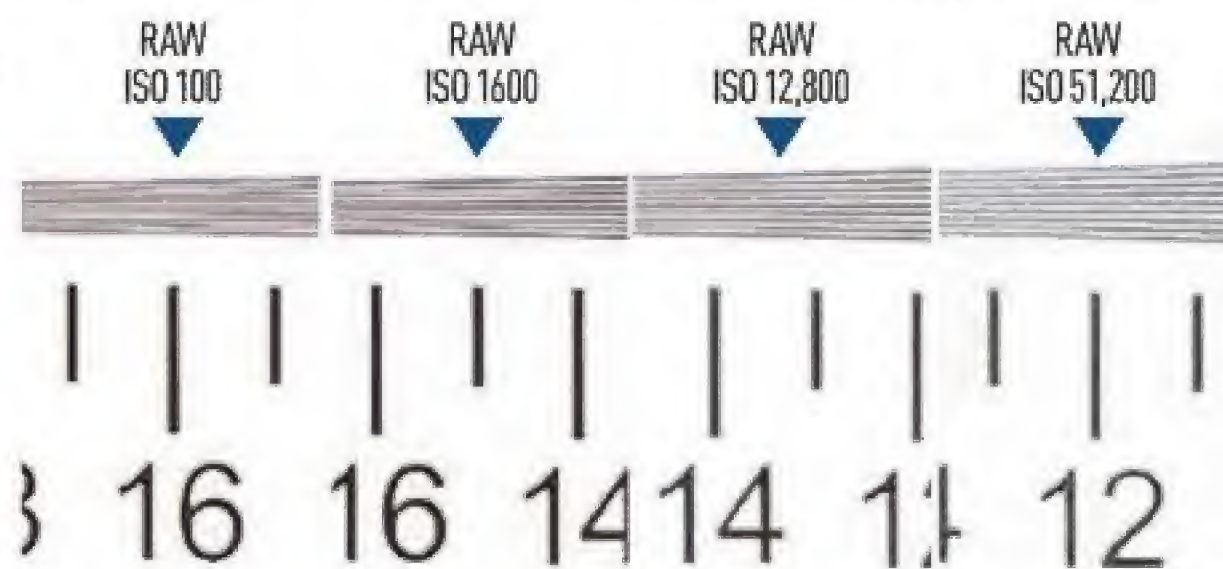
## Resolution

Unsurprisingly, the sensor outputs a similar performance to the one inside the recent XT100. At the (native) base ISO 200 setting, raw files show around 3,200l/ph, which is the same as many other models in this price range, although the extended, JPEG-only, ISO 100-equivalent option shows even better detail. This

drops to a still respectable 3,000l/ph once you get to ISO 800, but it's maintained well until ISO 3200, where it drops to 2,800l/ph. The maximum ISO 12,800 point on the native scale is where things fall once again, but only to 2,700l/ph. This consistency is impressive, with no sudden drops as you incrementally raise the ISO.



On the right we show details from our resolution chart test pattern (above). Multiply the number beneath the lines by 200 to give the resolution in lines per picture height.



## Noise



The crops shown below are taken from the area outlined above in red

Noise is as well controlled as we would expect for such a sensor, with pleasingly clean results at the base ISO 200 setting and steady control up to ISO 1600. Noise begins to take hold at ISO 3200, and while it becomes more prominent at ISO 6400, raw files can still be salvaged. As is often the case, the highest ISO 12,800 option is really best avoided. JPEGs can be treated with five levels of noise reduction in the camera, and while in particularly problematic scenes results can end up looking a little waxy, this isn't quite as destructive as may be expected in the ISO 3200-6400 range. The XF10 doesn't shoot raw images at extended sensitivity settings.

JPEG ISO 100



RAW ISO 400



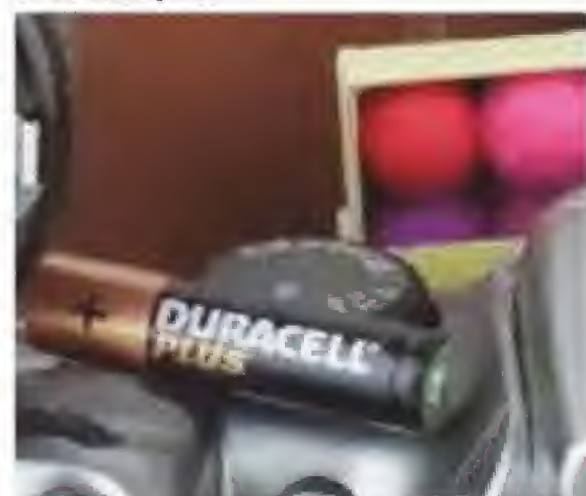
RAW ISO 1600



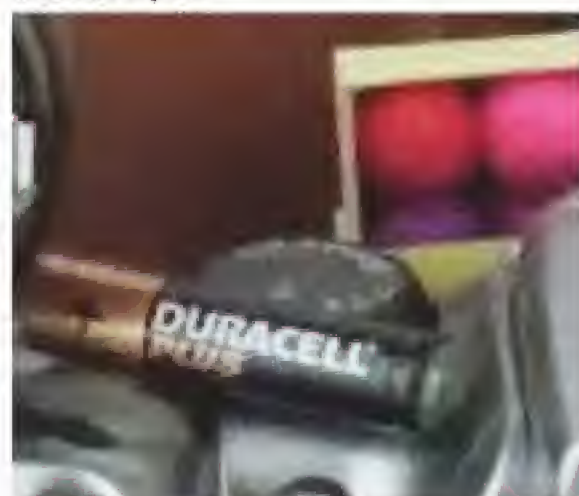
RAW ISO 6400



JPEG ISO 25,600



JPEG ISO 51,200



## Verdict



Things tend to move relatively slowly at the affordable end of the large-sensor/fixed lens end of the compact market. The fact that the XF10's only direct competitor at this price point is the soon-to-be-replaced Ricoh GR II, however – a camera that's three years old and still over £100 more expensive – gives it an edge from the off.

Indeed, at this price, it's managed to carve its own place in the market, although it does present an interesting question: is it reasonable to expect its 'absent' features? Many people would have no doubt preferred to see a viewfinder and mechanical image stabilisation, for example, but these would almost certainly come at the cost of size or price (or both). The lack of a hotshoe and option to use conversion lenses are perhaps less of a concern, though a built-in ND filter wouldn't be unreasonable to expect. While it's not completely devoid of frills, it remains a camera best suited to someone who simply wants a certain standard of image quality in a very small form.

This isn't to say that it performs badly, but there are certainly weaknesses worth bearing in mind. The relatively shallow burst depth disappoints, and video quality is equally unimpressive, but then many photographers never call upon either of these features. Perhaps the most significant shortcoming is the general performance of the autofocus system, which is far from ideal when you consider the XF10's appeal to street photographers.

Still, elsewhere shows it to be a capable camera with much to offer. Image quality is very pleasing, with good detail, low noise levels and a generally sound optical performance, and there's plenty of scope for customising images both before and after capture. It's also built very well, takes up little space and doesn't weigh much. For some people this is more than enough, so if you happen to fall into this camp it's worth a look.

FEATURES	7/10
BUILD & HANDLING	8/10
METERING	7/10
AUTOFOCUS	6/10
AWB & COLOUR	8/10
DYNAMIC RANGE	8/10
IMAGE QUALITY	8/10
VIEWFINDER/LCD	8/10



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# Epson EcoTank ET-7750

An A3-format photo and document printer with a built-in scanner and an extremely healthy ink supply. **Matthew Richards** cracks open a bottle in celebration

**W**hen it comes to large-format inkjet printing, cartridges are a source of constant consternation. They always seem to be running out of ink, even when you feel certain that you replaced them just the other day. Indeed, the optional 'XL' cartridges for Epson's own Expression Premium XP-900 A3 and Expression Photo XP-960 A3+ printers only have a paltry 9ml of ink in them, or thereabouts.

To make matters worse, many inkjet printers are sold with 'set-up cartridges' that have a very small capacity. You can find yourself

forking out for an expensive set of replacement cartridges after just 20 or so full-sized photo prints. By stark contrast, the EcoTank ET-7750 has real staying power.

Like Epson's ET-7700 A4-format printer, this upscaled A3 edition has print heads that are fed by comparatively large ink tanks, doing away with cartridges altogether. The ink is supplied in bottles, and the printer comes with two complete sets. Each set includes a 140ml bottle of pigment-based black ink for document printing, plus four 70ml bottles of dye-based cyan, magenta, yellow and 'photo black' ink for



Ink bottles plug into the top of each tank, enabling fuss- and mess-free filling

photo printing. All in all, the printer is supplied with the best part of a whole litre of ink. But there's a catch.

When the A4-format ET-7700 was launched, it was more expensive than competing cartridge-based models. It's sold with exactly the same inks in exactly the same quantities, sufficient for printing up to 3,400 6x4in colour photos, as well as some 14,000 mono A4 documents. However, taking the high purchase price into consideration, plus paper cost, you'd need to print all 3,400 photos before breaking even against the cost of buying and running a competing five-ink A4 printer, like the Canon Pixma TS6250. And naturally, with the Epson model, you have to pay the full amount up front instead of paying as you print. ➤





The 'Photo Enhance' mode, turned on by default, has made these landscape colours look a little lurid

## ➤ Bigger is better

With the ET-7750 printer the economies of scale work out rather better, though. As an A3-format model, it can create documents and photo prints that are twice as large as its smaller A4 sibling. It's also cheaper to buy than the A4 printer was when it was released and, even now, there's very little price difference between the two models. The purchase price compares much more favourably against other competing A3 and A3+ printers on the market.

Naturally, you wouldn't buy an A3 printer just for printing 6x4in photos. The two sets of ink bottles supplied should prove sufficient for

creating around 800 A4 photo prints or 400 A3 photo prints. The ET-7750 therefore makes good sense financially, and there's the plus point that you'll only need to top up the ink tanks once, however long it takes you to print that many photos.

The similarities between the Epson A3 and A4 EcoTank printers include high-resolution 5760x1440dpi print heads and variable-sized droplet technology. This can produce tiny droplets down to a size of 1.5pl (picolitre). Both printers have a built-in A4-size scanner, an SD/SDHC/SDXC memory card slot and a facility for printing directly onto white-faced CDs and

DVDs. Again, there's a 2.7in colour screen, although it's fairly small by today's standards and isn't a touchscreen. Instead, there's an array of control buttons spread out across the hinged front panel, which are handy for standalone photocopying or direct printing from memory cards. External interfaces include USB, wired Ethernet and Wi-Fi.

Paper handling is good, with two front-loading cassettes that are ideal for stocking with A4 plain paper for document printing, plus either 6x4in or 7x5in photo paper. There's also a rear feeder that can take any size of paper up to A3. This is more suitable for A4 and A3



Black & white photo prints are quite neutral, without noticeable colour casts, but can look a bit flat and lacking in punch



Skin tones look natural in this print, with automatic enhancements switched off





The main printer control panel is fairly straightforward, but a larger screen with touch-sensitivity would be more intuitive



The viewing windows found on the front of the printer enable you to do a quick and easy visual check on current ink levels

photo papers as well as thick paper or card, as the page is flipped over during printing. Speaking of which, auto duplex (double-sided) printing is also supported.

The maximum page size of A3 equates to physical dimensions of 420x297mm, which is noticeably smaller than the 483x329mm of A3+ or so-called 'Super A3' photo printers. As well as being smaller, the aspect ratio of A3 is a worse fit for photos taken on full-frame or APS-C format cameras that have a 3:2 form factor. For landscape-orientation prints, an A3 printer will crop a little more off the sides of the image.

Once you've used up all the supplied ink, ongoing running costs are much cheaper than pretty much any cartridge-based printer on the market. Replacement 70ml bottles of the dye-based inks used for photo printing cost around £10 each. This works out to about 14p per millilitre. Ink costs for most cartridge-based printers are ten times pricier. Even the most frugal A3+ printers, like the Canon Pixma Pro-10S and Epson SureColor P600, have ink costs that are around five times more expensive.

The bigger question is whether there's a compromise in terms of photo print quality compared with more dedicated A3 and A3+ 'photo printers'. These generally use an extended range of eight to ten inks, enabling greater fidelity for both mono and colour reproduction.



The two sets of high-capacity ink bottles supplied will be enough for around 400 A3 photo prints

### Quality counts

Epson has a long and illustrious history of creating six-ink photo printers that add light cyan and light magenta to the CMYK mix of a standard document printer. Over the years, the combination of a pigment-based black ink and CMYK dye-based inks has more usually been the preserve of Canon bubblejet printers, aiming for combined document/photo printing suitability. As such, there's a less generous colour space or 'gamut' on offer. It's equally true that most A3+ photo printers have additional grey inks, enabling better fidelity when printing black & white photos.

Despite its relatively limited ink range, the ET-7750's colour rendition is pretty accurate on the whole, with good tonal range. That said, automatic 'photo enhancement' is switched on in the printer driver by default. It can give snapshots a boost if image files are taken straight off the camera, but it's best to cancel the feature by disabling 'colour correction' for the sake of accuracy, especially with edited images.

The automatic photo enhancements can make blues and greens in landscapes look oversaturated, and give a reddish tinge to skin tones. Contrast and vibrancy can also look a bit over the top. Conversely, black & white photo printing is fairly free of unwanted colour casts but a little lacking in depth and contrast. Ultimately, neither colour nor mono photo quality is as good as that from printers like the Canon Pixma Pro-100S (dye-based) or Pro-10S (pigment-based) A3+ models.

Photo-printing speeds are pretty quick, especially in 'standard' quality mode, where the printer is about twice as fast as the A4-format ET-7700, at all matching page sizes. At standard/high-quality settings, 6x4in photo prints take 22sec/1min 10sec, and A4 prints take 1min 8sec/3min, while A3 prints take 1min 52sec/5min 7sec. That's about average for a dye-based photo printer, and about twice as fast as most pigment-based photo printers.

## Our verdict

A FEELING of dread can accompany large-format inkjet printing. Every print you create might be the last before you need to buy new cartridges, yet again. The ET-7750 is soothingly reassuring, not only because its ink tanks are much larger and the ink itself is vastly cheaper, but also because you can see the ink levels through viewing windows at the front. And they barely drop at all with each successive photo print. However, when it comes to outright photo-print quality, the Epson is good rather than great, with a relatively limited range of ink colours under the hood. It's geared more to a mix of document and photo printing, rather than being a photo specialist.

### Data file

**Price** £565  
**Printing method** Piezo inkjet  
**Ink technology** 4 dye inks, 1 pigment ink  
**Printing resolution** 5760x1440dpi  
**Colours** Cyan, magenta, yellow, photo black, pigment black  
**Dimensions** 526x415x168mm  
**Weight** 10.5kg  
**Compatibility** Mac OS X 10.6.8 or later, Windows XP or later

**Amateur Photographer Testbench Recommended**  
 ★★★★★

### For and against

- + Cheap ink costs
- + Comes with enough ink for 400 A3 photo prints
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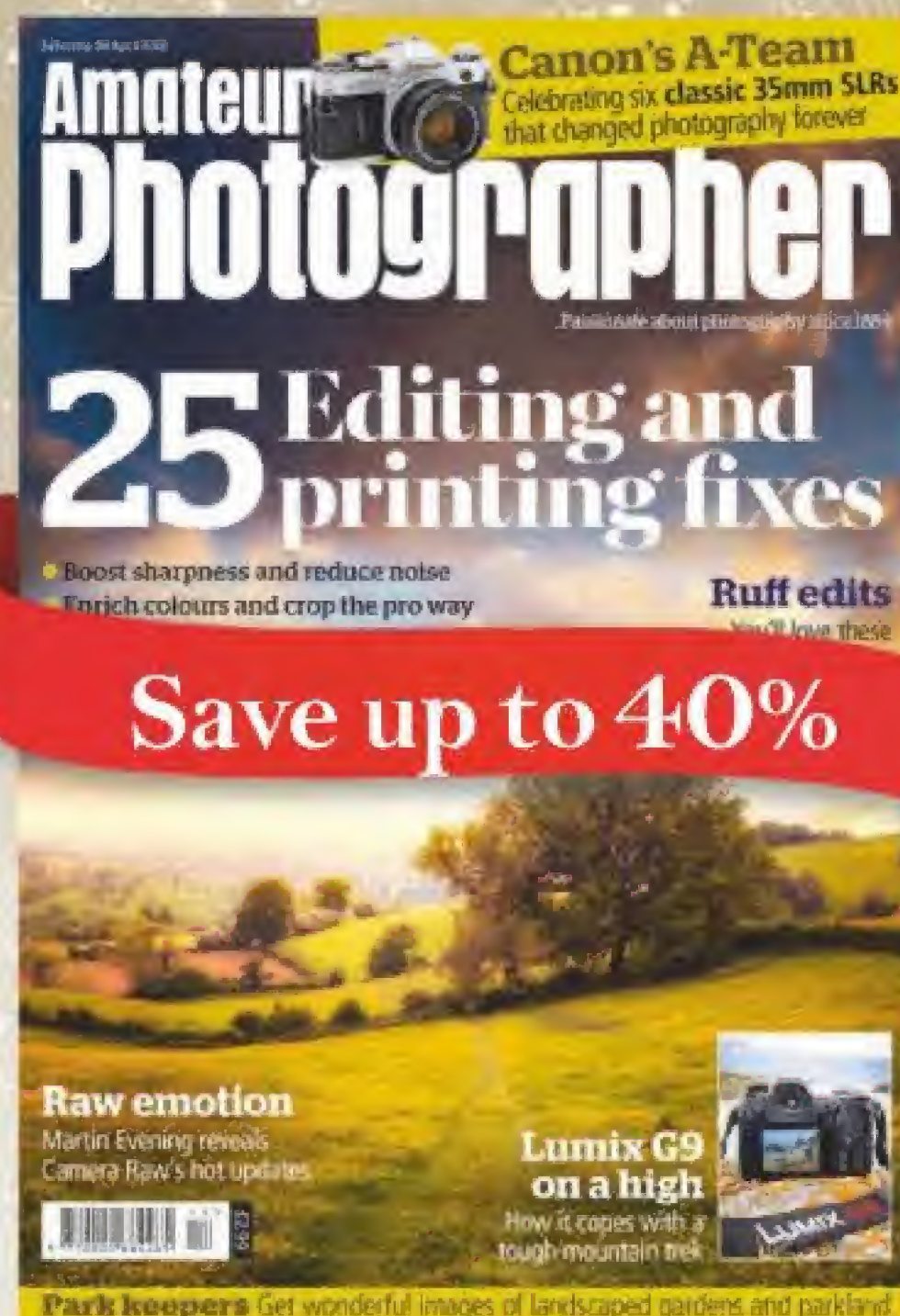




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# Adonit PhotoGrip

**Andy Westlake** tests a robust, easy-to-use smartphone clamp that improves handling when taking pictures

● £44.99 ● [www.adonit.net](http://www.adonit.net)

THERE'S no doubt that latest-generation smartphones are seriously useful photographic tools. But without exception, they have a serious flaw when used as cameras: their thin slab-like form means that they're horribly insecure to hold. This can discourage you from attempting certain shots for fear of dropping your precious device.

Adonit has designed the PhotoGrip to fix this problem (perhaps surprisingly, given that its main business lies in making touchscreen styluses). In essence, it's a chunky rubberised handgrip for your phone with a basic Bluetooth shutter release. It will work with most devices, even if they have a case fitted – just make sure yours isn't too wide or narrow to fit before buying.

Before you start, you first have to pair the Bluetooth release to your phone. As usual, you only have to do this once; however the release can only be paired with one phone at a time.

Thereafter, using the PhotoGrip is simplicity itself. Simply pull the two halves of the clamp apart and slide in your phone; it'll be held in place very firmly, with rubberised pads on the inside preventing any scratching. Holding the shutter button down for a second turns it on, with a small blue LED lighting up. Then whenever the camera app is active, pressing the button will take a picture. In a neat touch, the Bluetooth release can even be removed from the grip for use as a remote control.

Aside from the grip itself, you get a few extras in the box. There's a small tripod that can double up as a handgrip for video shooting, along with a neoprene pouch that will hold the grip with a large smartphone attached, and which comes with its own neckstrap. A small stylus clips into the side, which could come in handy for changing settings in cold weather. Finally a short micro USB cable is included to recharge the shutter release, although with a promised 72,000-shot or 20-hour lifespan, you may not need to do this very often.

## Verdict

I tested the Adonit PhotoGrip with the Huawei P20 Pro, and found that it completely transforms the device's handling when using the camera. It holds the phone tightly no matter what angle you point it, and the rubberised grip is comfortable to hold and feels completely secure in your hand. However it's disappointing that there's no eyelet for a wrist strap, and I ended up screwing one into the tripod socket. That small gripe aside, it's a great accessory for smartphone photographers.



### Case-friendly

The PhotoGrip's spring-clamp design means it'll work happily with your favourite phone case.

### Removable release

The Bluetooth shutter button slides out of the grip for use as a remote control. This also reveals a Micro USB port for charging it.

## At a glance

- Handgrip for smartphone photography
- Built-in Bluetooth shutter release
- Works with Android and Apple phones
- Holds devices from 65mm to 80mm in width

### Clip-in stylus

A small red stylus with a transparent disc head clips into the side of the grip, and is intended for use with image-processing apps.

### Stand mode

The PhotoGrip is shaped so it can double-up as a desk stand that will hold your phone in the upright position.

### Tripod socket

A standard 1/4in socket in the base allows attachment to either the supplied mini-stand or a full-size tripod.



## ALSO CONSIDER: MIGGO PICTAR

This bulkier and more complex device (£60) includes three dials and a two-stage shutter release. It communicates with your phone using sound, which allows control of a wider range of settings, but means it only works with the dedicated Pictar app. Originally designed for Apple phones, an Android version is also available but hard to find.





# TechSupport

Email your questions to: [ap@ti-media.com](mailto:ap@ti-media.com), Twitter @AP\_Magazine and #AskAP, or Facebook. Or write to Technical Support, Amateur Photographer Magazine, TI Media Limited, Pinehurst 2, Pinehurst Road, Farnborough Business Park, Farnborough, Hants GU14 7BF

## How important is it to edit my photos?

**Q** Sorry if this is a really dumb question. I have been a keen photographer since I was a teenager. I only had a basic point and shoot but still managed to capture some nice images. Fast forward through studies, marriage and kids and I finally got myself a DSLR and a prime lens. Photography can be an expensive hobby and it's easy to keep on buying – so my question is how important is Photoshop or Lightroom? Are there any free alternatives. I looked at GIMP but it's quite tricky. Is it worth persevering with GIMP?

**Farah (AP forum)**

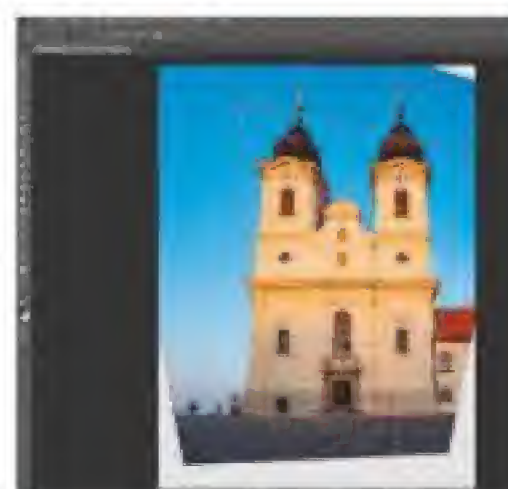
**A** When shooting with film, especially transparency film, there is a much greater need to get the picture right because correcting it afterwards is difficult. Some say that this is a great argument in favour of film and they revel in the required discipline to achieve great in-camera results. It's a perfectly valid point of view but an equally valid one is that digital provides huge opportunities for extracting more out of your images in post-processing, even from less-than-perfect images. It really boils down to your personal preference. My personal goal is to think about my pictures before I take them so that they are in good shape before any post-processing. However, it's very rare that I find an image doesn't require additional work. You can look at that in a couple of ways: either you could do better behind the camera or you're a perfectionist. I like to think that post-processing enhances my inherent creativity. GIMP is quite rich in features but its user-interface is not very friendly. I'd suggest you try some other free programs like [Paint.net](http://Paint.net), Photofiltre Studio or PhotoScape.

## Queries on changing a focusing screen

**Q** I found myself acquiring a 300mm manual lens yesterday for a pittance – £5 at a local forum (the old-fashioned kind of forum, where people gather in real life, mostly to sell stuff). Anyway, I like the lens a lot but the focusing is slow. My camera is a Pentax K-50 – my first DSLR, which I believe allows for changing the focusing screens (it is listed in the manual as 'interchangeable Natural Bright Matte III focusing screen'). I have a few questions as I would like to add a split focus screen but obviously wanted to do my research. Am I correct in thinking that adding a focus screen with a 45° split-image focus is not going to affect AF when using regular KAF2-compatible lenses? How much is the optical image quality going to be affected? I would assume this depends on the quality of the screen I receive/purchase? Is AE going to be affected? I have read that a darkening of the optical image is to be expected but does this carry across to the AE metering? Finally, how difficult is it to change the focus screen? I am an electrical engineer who takes things apart a lot, but taking apart cameras, I happen to know from past experience, is a little finicky. It looks like it's just a matter of disconnecting the retainer lever and it pops out but again, I always like to do my research.

**C P Robertson (AP forum)**

**A** With a bit of finesse and dexterity and a decent pair of tweezers, it's not too difficult to replace the focusing screen. Be aware that the screen drops out so make sure you've secured it with the tweezers. AF won't be affected as the focus sensor is under the mirror, not above the screen. As long as you use a good-quality



The Perspective Warp tool in Photoshop CC fixes perspective easily

## How do I straighten my image?

**Q** Please find an image I took recently in Hungary, of a church overlooking Lake Balaton. As you can see, it is rather all over the shop perspective-wise. I have Photoshop CS6 and know that it's quite out of date now. I find my efforts at straightening photos like this one are quite a challenge when using the Perspective option in the Transform tool. Am I likely to find better tools in the latest Photoshop CC?

**Aaron Foulkes**

**A** The quick answer is, yes. While Photoshop CS6 had some Warp tools which were new and very advanced for its time, they didn't address the requirements of straight-line perspective adjustments. Photoshop CC has taken Warp into many new areas, including a new Perspective Warp tool. I am guessing that the problem you had with the Transform-Perspective tool is that it works on the boundaries of the image and the adjustment point sticks to the boundary, then unexpectedly jumps from one side to an adjacent one. Photoshop Perspective Warp is much more friendly. You simply draw a scaffold rectangle onto your image and then pull the corners and sides around as much as you need. You can redraw the scaffold to adjust different areas of the image if required and you can repeat these steps as much as you need.

replacement, like a Pentax one, the view should be as good, if not better, than before. You may have problems when using spot-metering as the metering sensor does transmit through the focusing screen and the prismatic nature of the split focusing aid in the centre of the screen will probably divert light away from

the central part of the sensor. Beware of second-hand ones that are cut down screens originally used in old film SLRs. Have you thought about using the live-view mode on the rear LCD screen of the camera instead?

**Q&A compiled by Ian Burley**



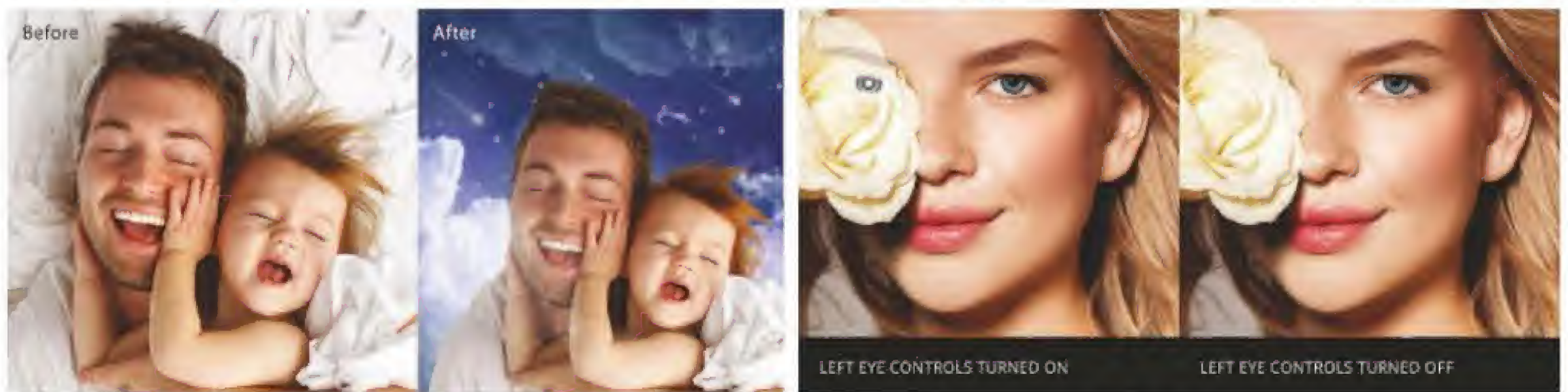
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**Andy Westlake** tests a robust, easy-to-use smartphone clamp that improves handling when taking pictures

**Acronit PhotoGrip**

Andy Westlake tests a robust, easy-to-use smartphone clamp that improves handling when taking pictures

**At a glance**

- Handy to use
- Easy to use
- Easy to use
- Easy to use

**Verdict**

Acronit PhotoGrip is a handy, easy-to-use smartphone clamp that improves handling when taking pictures

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**A: Check the power supply**

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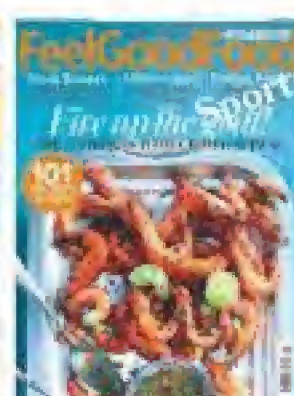
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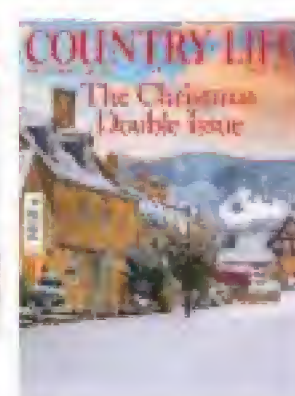


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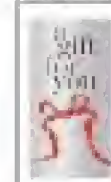
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## Professor Newman on...

## Shake, rattle and roll

Bob Newman takes a considered look at the development of in-body stabilisation



In 2004 Konica Minolta introduced a digital camera that was to change the design of future cameras radically. It was the Dynax 7D: a single lens reflex using the Minolta A autofocus lens mount. While much of the camera's specification matched that of its competitors, with the same Sony 6MP CCD sensor that was found in every competitor except those from Canon, one feature stood out. The 7D boasted in-body image stabilisation, which offered the advantage of providing stabilisation with any lens fitted to the camera.

The system worked using a gyro sensor in the camera, which could detect the camera being swung either vertically or horizontally. Since the camera had an electronic lens mount, it could determine the focal length of the lens fitted. With that information and the angle of

swing, the resultant movement of the image on the sensor could be calculated and the sensor moved to compensate exactly.

In 2006 Pentax produced the second camera with in-body image stabilisation, the K100D. This had one major difference from the Minolta camera: instead of piezoelectric actuators to drive the sensor, it used voice-coil motors, an electromagnetic mechanism. The sensor unit had two coils mounted on it, one for each of the x and y directions. Permanent magnets on the housing maintained a magnetic field parallel with the axis of the lens. When a current was passed through the coils, a force was exerted in either the x or y direction, resulting in movement of the sensor. Both systems had their advantages and disadvantages.

### Electromagnetic system

The piezo system maintained the sensor in position when de-energised and provided direct control of position, while the voice-coil motors could react faster but required a more complex control system. Today the electromagnetic system has become the dominant one, used by all current in-body stabilisation systems. Three years later, Pentax released the K-7 camera, with another tweak. It had a three-axis gyro system and could detect rotation around the axis of the lens in addition to horizontal and vertical swing. By adding a third voice-coil motor to the sensor assembly, it could be made to rotate to correct this movement.

In 2012 Olympus added two more axes to provide what was advertised as a '5-axis system'. The two extra axes were translational, as opposed to rotational movement in the x

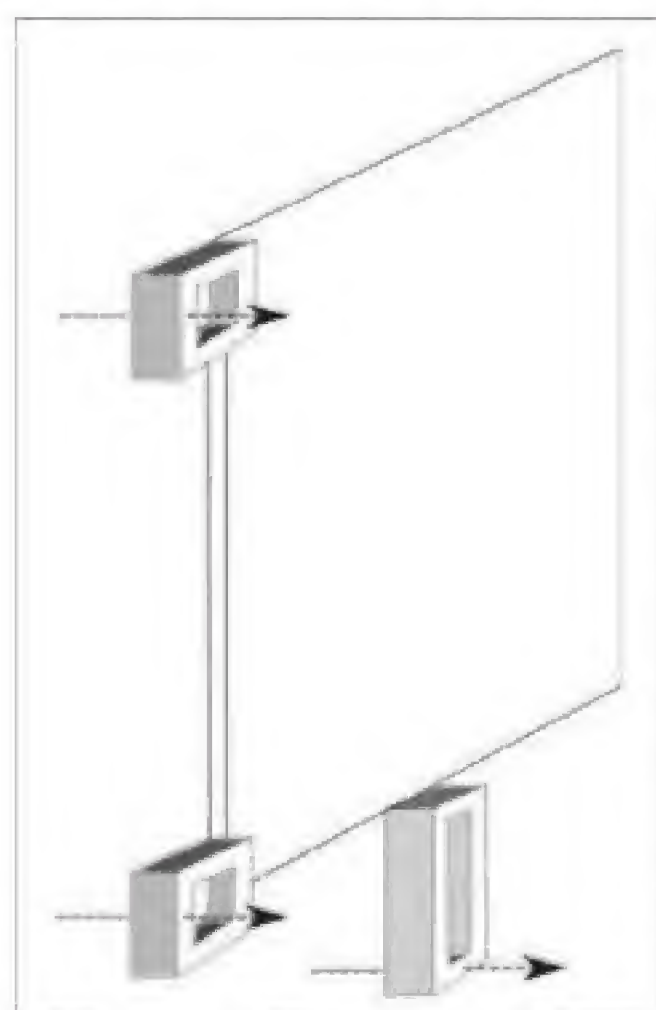
and y directions. This was detected using accelerometers, as opposed to gyros. It required no additional sensor actuators, since this mode of movement also required simply x or y movement for correction.

### Full-frame mirrorless

In-body image stabilisation is a feature in all the new full-frame mirrorless cameras, save the Canon R system which sticks to lens stabilisation only. There is an open question as to whether the larger sensor will degrade stabilisation performance with respect to the smaller sensor systems, such as Micro Four Thirds. There are two intrinsic disadvantages associated with the larger sensor. First, being larger it will have more mass and therefore more inertia. This means that it will move more slowly or will need more electromagnetic force to drive it, and since the sensor is larger it has to move further to correct the same angular movements. Its size disadvantage is actually squared.

Against this, are a number of mitigating factors. First, this size disadvantage either slows the system down or requires more energy to keep it acting at the same speed. Second, the sensor and related optical components are not the whole of the sensor assembly, and it's unlikely that a complete FF sensor assembly will be heavy in proportion to the sensor area. Last, since the final image from a larger sensor will be magnified less, the stabilisation system does not have to achieve the same accuracy.

In summary, while the smaller sensor system certainly should be more effective, all other things being equal, it's not beyond the realms of possibility that if these things are not made equal, the larger sensor system might be made to perform just as well.



The sensor is moved by three voice coil motors: one moving the unit up and down (bottom), two moving it sideways (left). Differential sideways movement causes rotation. The dotted arrows represent the magnetic field. A current in the coils causes them to move perpendicular to the field.

Bob Newman is currently Professor of Computer Science at the University of Wolverhampton. He has been working with the design and development of high-technology equipment for 35 years and two of his products have won innovation awards. Bob is also a camera nut and a keen amateur photographer

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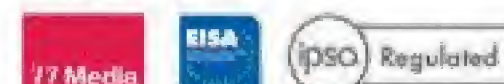
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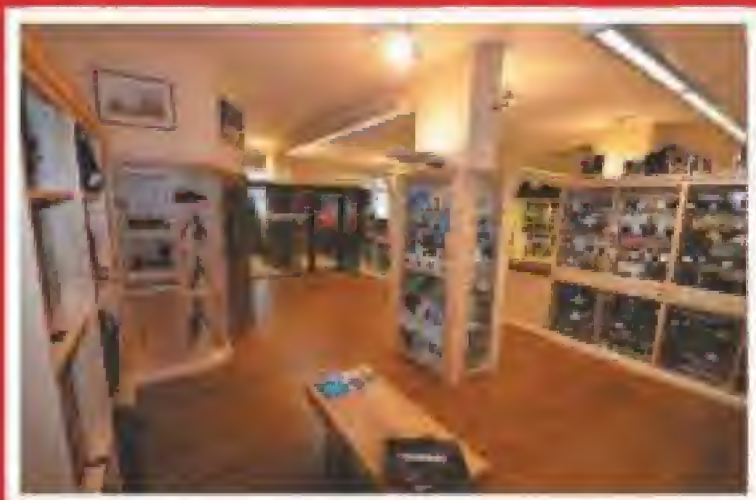
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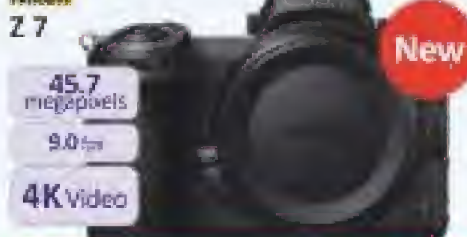


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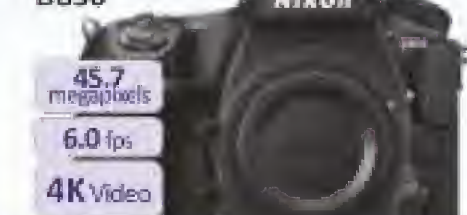
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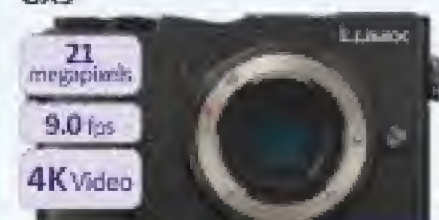
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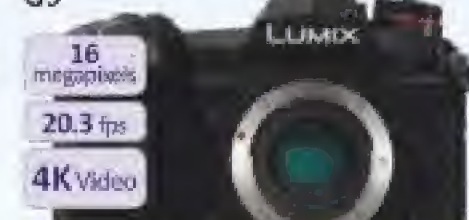
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£494 inc. £85 Cashback\*  
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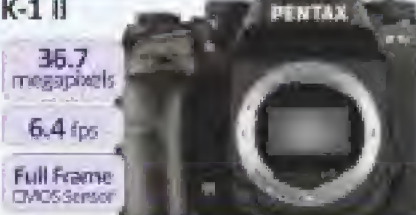
RECOMMENDED LENSES:

Olympus 25mm f1.2 Pro £889  
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**PENTAX**

K-1 II



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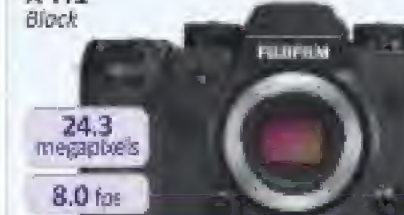
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KP Body £920  
K-70 from £599

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Pentax 50mm f1.4 FA\* £1199  
Pentax 100mm f2.8 Macro £477  
Pentax 15-30mm f2.8 £1449  
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Pentax 28-105mm f3.5-5.6 £477  
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**EOS 5D Mark IV Body £3249**

30.4 megapixels 7.0 fps Full Frame CMOS sensor

**EOS 5D Mark IV Body £3249**

**Canon** **PRO**

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30.3 megapixels 7.80 fps 4K30P movie mode

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**Canon** **PRO**

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**Canon** **PRO**

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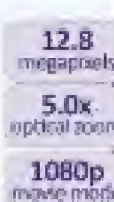
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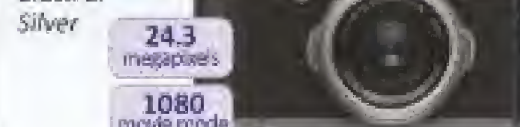


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IXUS 285 HS.....	£169
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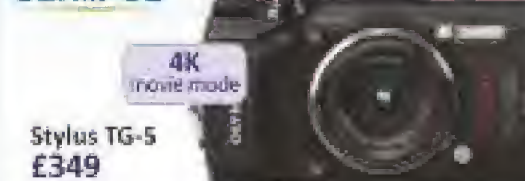
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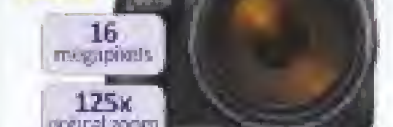
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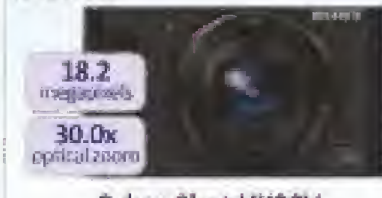
£179



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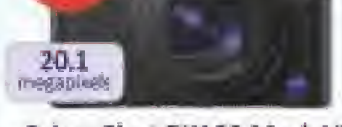
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# Final Analysis

**Roger Hicks considers...** 'Armenian Patriarch, American Colony, Jerusalem', c.1900-1910

**F**ounded in 1881, the American Colony in Jerusalem was a self-supporting Christian utopian and philanthropic community. They were a fascinating bunch and from about 1900 onwards they ran a photographic division with several photographers. They photographed many things: historic buildings, local people at work, and of course worthies.

Harootiun Vehabedian was the Armenian Patriarch of Jerusalem and there would have been a steady demand from the faithful for pictures of him. I first noticed this picture as a thumbnail when I was browsing through the wonderful Library of Congress online collections: that extraordinary headgear, apparently of watered silk, is hard to miss. A bigger version revealed not only his suitably patriarchal visage but also the cascade of medals and crosses on his chest, his massive sleeves, his rosary and the strangely gathered fabric at his waist. Kipling's phrase, 'more than oriental splendour', immediately came to mind.

## Inherently theatrical

Then I started looking at it as a photographer. It's almost certainly a daylight studio with a big north-facing roof light (look at the shadows) because location photography with such even lighting would have been difficult or impossible. The uncluttered background argues for the same: the buttoned sofa and the ornately carved table could either have been props, or borrowed from elsewhere in the colony. The left hand side of the background is however a puzzle. Is it painted? Or a shadow of something, from a lamp to camera left? Whatever it is, it well illustrates that an absolutely plain background is rarely as attractive as one that has some texture or pattern, but is

**'The rosary illustrates an old portraitists' trick: asking someone to hold something with which they are familiar'**



not so cluttered as to distract attention from the principal subject.

The posing must have been difficult. To a certain extent, all churches are inherently theatrical, and the Patriarch would be the lead character, the centre of attention. Did he come up with that thoughtful look, staring meditatively into the distance, or was it suggested? The rosary illustrates an old portraitists' trick: asking someone to hold something with which they are familiar, be it a pipe, a bracelet or a rosary.

All in all, it is a superbly executed photograph, and it provides a wonderful example of how quickly things can change. Little more than 100 years ago the Ottoman Empire still existed; the Armenian Genocide had yet to happen; and the State of Israel was only a dream. The American Colony itself would dissolve in the 1950s, though improbably it lives on as a hotel. More than most photographs, this one is a voyage in time and space.

AP

Roger Hicks has been writing about photography since 1981 and has published more than three dozen books on the subject, many in partnership with his wife Frances Schultz (visit his website at [www.rogerandfrances.eu](http://www.rogerandfrances.eu)). Every week in this column Roger deconstructs a classic or contemporary photograph. Next week he considers an image by Oscar Espinosa





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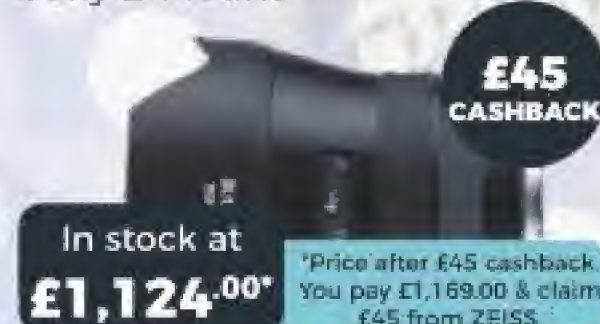
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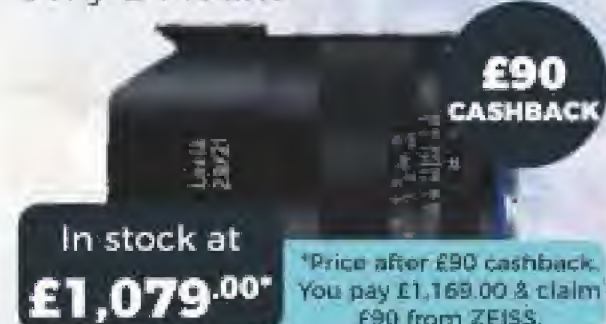


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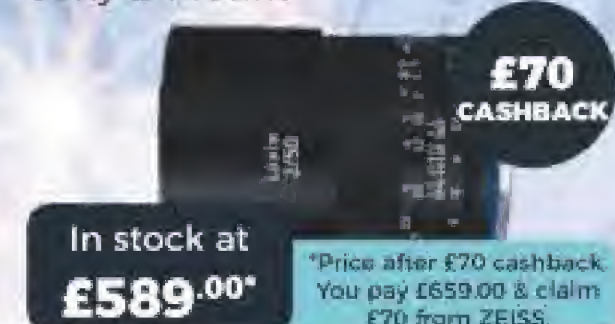


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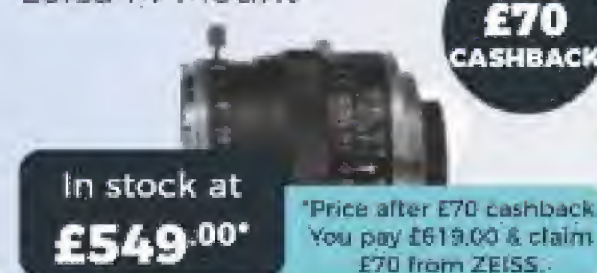


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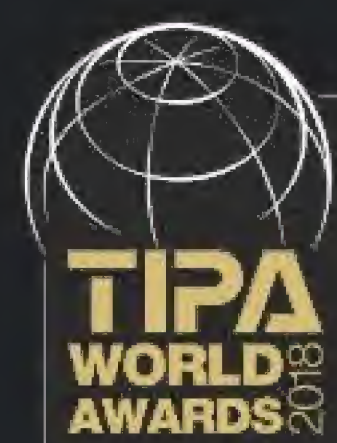
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